Historical and Archaeological Heritage Management and Cultural Tourism in India and Japan: Issues, and Prospects for Development

Editors
V. Selvakumar and Manabu Koiso

Tamil University, Thanjavur, India
and
Kobe Yamate University, Kobe, Japan
2019

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Historical and Archaeological Heritage Management and Cultural Tourism in India and Japan: Issues, and Prospects for Development

Proceedings of the India-Japan International Symposium organised by the Department of Maritime History and Marine Archaeology, Tamil University, Thanjavur, India, and the Department of Tourism, Kobe Yamate University, Japan, on February 12, 13 and 14, 2019 at Thanjavur, India.

Editors

V. Selvakumar and Manabu Koiso

Tamil University, Thanjavur, India

and

Kobe Yamate University, Kobe, Japan

2019

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Note: The views and opinion expressed in the papers are that of the authors and they do not represent the views of Indian Council of Historical Research, Japan Society for the Promotion of Science, the Tamil University and the editors.

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Dr. G. Balasubramanian
Vice-Chancellor
Tamil University
Thanjavur 613010
Tamilnadu
India

Foreword

The Tamil University was established in 1981 and it came into existence from 1983. The motto of Tamil University is *ulluvathellam uyarvullal,* which means "think always about noble thoughts;" and this motto was taken from the *Thirukkural,* composed by Thiruvalluvar in Tamil. The Tamil University focuses on higher research in various areas of Tamil studies such as language, literature, folklore, history, archaeology, culture and heritage of the Tamils, and the different branches of Social Sciences and Sciences.

The Tamil University regularly organises symposia, seminars and workshops for the benefit of the public as well as scholars and students. The India-Japan International Symposium titled *Historical and Archaeological Heritage Management and Cultural Tourism in India and Japan: Issues, and Prospects for Development,* sponsored by Japan Society for Promotion of Science, Japan, and Indian Council of Historical Research, New Delhi was jointly organised by the Department of Maritime History and Marine Archaeology, Tamil University, and the Department of Tourism, Kobe Yamate University, Japan, on February 12, 13 and 14, 2019.

The theme of the symposium focused on Heritage Management, which is an important area of research in the current context of the globalised world. Such academic collaborations would definitely lead to exchange of knowledge between the universities of these two nations, which lie in the two terminal points of Asia.

I am happy that the organisers from the Tamil University, India and Kobe Yamate University, Japan have organised the symposium that focused on such an important, current theme related to culture and

heritage. They have taken efforts in promptly publishing the papers, after due review of the research papers.

I hope that the ideas and suggestions presented here would be very useful for the preservation and promotion of cultural heritage in a global context. I wish them to organise more such application-oriented symposia in future.

Station: Thanjavur
Date: 22 April 2019

G. Balasubramanian

Mr. Tomio Saito
President
Kobe Yamate University
Kobe 650-0006
Japan

Foreword

The Kobe Yamate University was established in 1999; but the history of Kobe Gakuen or the educational corporation administrating this university as well as Kobe Yamate College and Kobe Yamate Girls' Junior and Senior High School goes back to 1924. It started as a junior high school for girls at the time, when girls usually gave up study after graduating from junior schools. The mottos of *jigakujishu* and *josotoya,* which mean self-learning and cultivation of sentiments, respectively, were adopted as the spirit of foundation; both of which are handed down also to Kobe Yamate University.

Even though the university has only two departments - Tourism and Applied Sociology - under the single Faculty for the Study of Contemporary Society, its location in middle of the port-city of Kobe has a great advantage for learning and experiencing not only the Japanese culture, but also various foreign cultures. Kobe has opened its modern port to the world back in 1868 and since then, many foreigners from different countries and of various faiths settled for trade and built their places for worship. Many churches, a synagogue, a mosque, a mandir, and a gurudwara now stand amongst Japanese shrines and temples which adorn the townscape and symbolise harmony in diversity and peace.

It is of our great pleasure that our university from such a city together with an eminent university in India, the Tamil University could organise the India-Japan International Symposium titled *Historical and Archaeological Heritage Management and Cultural Tourism in India and Japan: Issues, and Prospects for Development,* sponsored by both Indian Council of Historical Research, New Delhi and Japan

Society for Promotion of Science, Tokyo. I heartfully appreciate the Vice-Chancellor and all the staff members of Tamil University for painstakingly organising the symposium and leading to its success in the historical city of Thanjavur. I also thank all the participants from both India and Japan who attended and contributed to this precious volume.

Tourism has become one of the most important industries of the 21st century. Any kind of cultural heritage must be rightly sustained, managed and passed on to the next generation. The present symposium has become a wonderful occasion to exchange knowledge and views on the related subjects by leading scholars from both the countries and I have no doubt that this book, a fruit of the symposium, would become a milestone for the future studies.

Station: Kobe **Tomio Saito**
Date: 23 April 2019

Preface

The India-Japan International Symposium titled *Historical and Archaeological Heritage Management and Cultural Tourism in India and Japan: Issues and Prospects for Development,* sponsored by Japan Society for Promotion of Science, Japan, and Indian Council of Historical Research, New Delhi, organised at Tamil University, Thanjavur, on 12, 13, and 14 February 2019, India is the result of our deep concern for Cultural Heritage Management and its development-oriented application for the benefit of the society.

The objective of the symposium was to enhance the approaches to heritage management and cultural tourism in India and Japan, and mutually learn from the experiences of these two nations and other Asian and African countries. In the context of globalization and the fast pace of development of urbanism, heritage has become a key area of interest among states, the public and the youth. As more people visit the heritage sites and monuments for cultural tourism, and value history and heritage, there are demands for museums and excavation and preservation of archaeological sites. The development of the discipline of heritage management mainly began in the late 20th century. The idea of social development is associated with heritage management more often nowadays. Heritage management is a vast, diverse arena involving a number of stakeholders, and here the papers incorporated in the symposium proceedings mainly focus on archaeological heritage management issues. We also have papers stressing the importance of heritage awareness programmes and heritage education.

The symposium is an attempt to understand the issues related to heritage management in global contexts. The themes covered in the symposium are limited and they may not represent the entire range of case studies and many regions of India or Japan or Asia. We hope to organise more such events at national and international levels to understand the issues in Heritage Management. In future we shall involve more researchers and heritage managers across Asia. We hope that the outcome of the symposium published here would benefit many of the stakeholders of heritage management.

- Creation of awareness about heritage among the public is an important component of heritage management. On this occasion, we organised a photo exhibition at Thanjavur Palace Complex on the archaeological sites of Keezhadi, Azhagankulam and Pattaraipperumpudur, excavated by Tamil Nadu State Archaeology Department for creating awareness among the public.

The symposium and the proceedings were the results of several months of planning and organization. We attempted the best of our efforts to organise the symposium and publish the proceedings. If there is any lacuna in this work, we take the full responsibility. Most of the participants sent the papers and were prompt to accept the comments of the reviewers and incorporate the changes. Some of the scholars could not contribute full papers, due to their prior commitments and busy schedule. We have included their abstracts, due to the importance of their work.

We would like to thank Dr. G. Balasubramanian, Vice Chancellor and Dr. S. Muthukumar, Registrar, Tamil University, Thanjavur; the Finance and Grants sections of Tamil University; Indian Council of Historical Research, New Delhi, India; Japan Society for Promotion of Science, Japan; Professor N. Athiyaman (Late Dean of Faculty of Manuscriptology) and Professor S. Rajavelu, Head of the Department of Maritime History and Marine Archaeology; Professor R. Neelakantan and Dr. Anbu Jeba Sunilson, Professor P. Jayakumar, Dean, Faculty of Manuscriptology and Director in-charge, Publication Division, Tamil University; Mr. G. Balachandran, IAS (Rtd), Bangalore; Mr. T. Udhayachandran, IAS, Commissioner of Archaeology, Tamil Nadu; Mr. R. Balakrishnan, I.A.S., Mr. R. Komagan, Engineer, Kumbakonam; Dr. L. Thiyagarajan, Professor (Formerly Principal), Government Arts College, Ariyalur; Dr. V. Vedachalam, Senior Epigraphist; Dr. R. Sivanandam, Deputy Director, Tamil Nadu State Archaeology Department; Dr. A.M.V. Subramanyam, Superintending Archaeologist, Dr. V.P. Yathees Kumar and Dr. V. Muthukumar, Southern Circle, ASI; Mrs. Jaseera C.M., Mr. K. Mathivanan, Dr. S. Gowrishankar and Dr. K. Moogambikai, Guest Assistant Professors, Dept. of Maritime History and Marine Archaeology; Mr. K. Mathivanan; Mr. M. Selvaraj, Estampage Assistant, Department of Epigraphy and Archaeology, Tamil University; and the scholars and individuals listed under the organising committee, coordination committee, supporting team and volunteers. We would like to thank all the delegates and speakers who have contributed papers and also have assisted in the organization of the seminar in one way or the other.

We would like to thank Dr. K.R. Sankaran, Associate Professor, AVC College, Mayiladuturai; Dr. S.B. Darsana, Assistant Professor (Contract), Central University of Tamil Nadu, Tiruvarur and Dr. Parth Chauhan, IISER, Mohali, for reviewing/proof checking the papers published here.

We would like to thank Mr. Venkatesh Krishnamurthy for copy-editing the work thoroughly, Mr. Vai. Ramamoorthy for typesetting and Mr. S. Veerabahu for printing the work meticulously.

Manabu Koiso **V. Selvakumar**

Abbreviations

AMASR - Ancient Monuments and Archaeological Sites and Remains Act

AMC - Ahmedabad Municipal Corporation

ARE - Annual Report on Indian Epigraphy

ASI - Archaeological Survey of India

ATM - Attirampakkam

CABA - Central Advisory Board on Archaeology

CBT - Community Based Tourism

CRM - Cultural Resource Management

DHAN - Development of Humane Action Foundation, Madurai

DOAM - Department of Archaeology and Museum

DRDA - Defence Research and Development Agency

EI - *Epigraphia Indica*

FIP - French Institute of Pondicherry

FSI - Floor Space Index

GDP - Gross Domestic Product

GNP - Gross National Product

HWT- Heritage Walk Trivandrum

IAS - Indian Archaeological Society

ICOMOS - International Council on Monuments and Sites

INR - Indian Rupee

INTACH - Indian National Trust for Art and Cultural Heritage

ISPQS - Indian Society for Prehistoric and Quaternary Studies

JICA - Japan International Cooperation Agency

LHCR - Local Heritage and Cultural Route

LPCP - Law for the Protection of Cultural Properties

LTC - Local Tourism Circuit

MMRDA - Mumbai Metropolitan Regional Development Authority

MOU - Memorandum of Understanding

NABARD - National Bank for Agriculture and Rural Development

NGO - Non-Governmental Organisations

NPO- Non-Profit Organisations

NRI - Non-Resident Indian

OUV - Outstanding Universal Value

PPCP - Public-Private-Community Partnership

SDG - Sustainable Development Goals

SHG - Self Help Group

SII - South Indian Inscriptions

SNNPR - Southern Nations, Nationalities, and Peoples' Region

SNS - Social Network Services

SPIC - Southern Petrochemical Industries Corporations

SVG - Scalable Vector Graphics

TDR - Transferable Development Rights

ULB - Urban Local Body

UNDP - United Nations Development Programme

UNEP - United Nations Environment Programme

UNESCO - United Nations Educational, Scientific and Cultural Organisation

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1. Introduction

V. Selvakumar and Manabu Koiso

The modern discipline of archaeology has its roots in the antiquarianism and other similar movements that emerged in the Western world in the pre-modern era. During the early phase of the development of the discipline, archaeological sites and monuments were explored, excavated, documented and plundered, and the antiquities were transported to various museums across the world. Because of colonialism the practice of archaeology was introduced in many parts of the world. The antiquarians and collectors were excited to collect antiques and precious materials, and were eagerly reconstructing the history of human kind, and proudly displaying them in the museums.

The discipline of archaeology, founded by the antiquarians and enthusiasts, now evolved into a professional branch of knowledge during the 19th and 20th centuries, with application of advanced theoretical approaches through the interactions with various branches of knowledge. The concepts of heritage and heritage tourism gained ground from the late 20th century with the transformation in the global socio-economic spheres. Archaeological sites and monuments were generally seen as mere source materials for writing the history in the 19th and early 20th centuries. From the traditional approach of treating archaeological remains as mere sources for history, the focus has now shifted to the active preservation and promotion of heritage remains, and also to imparting heritage and history education to the younger generation and the lay public. However, the concept of historical heritage and the perception of archaeological heritage as a resource that can be related to the people and promoted through awareness activities began to gain currency mainly from the later part of twentieth century. But the perception and understanding of archaeological heritage as an important resource have not percolated deep into the academic and administrative spheres in many parts of the world. Due to the lack of understanding of the importance of heritage and heritage management in some contexts, the archaeology departments are seen as waste of public money. However, the heritage sites and contexts form a better

medium for imparting an understanding of history, culture and heritage among the public.

Archaeologists have begun to focus on the broader social issues, relevance of their discipline to the contemporary society, heritage management and public awareness, due to the influence of post-processual schools of thoughts. More attention is necessary on the areas such as heritage management, heritage education, and social relevance archaeology in the current context.

Heritage Studies and Heritage Management

Heritage studies in general and heritage management in particular are upcoming areas of focus in the current post-modern contexts, where the world by and large has been influenced by the liberalisation, privatisation and globalisation in the post-colonial contexts. Heritage is considered as a valuable resource that is cherished and appreciated, and has become a commodity that can be consumed, primarily through tourism. It is also a source of identity that can be associated with a particular community or group or a nation and an attribute that people can become proud of. Heritage has broader connotations incorporating diverse aspects, categorised as 'tangible and intangible' and 'natural' and 'cultural,' and these fragmentations of heritage are not justifiable, since these components are inseparable and are intimately interrelated. Archaeological remains and material culture together form an important component within the sphere of heritage and they pervade all across the landscapes, where communities live and subsist.The physical environment with its landscapes, hills and oceans form the natural heritage; human engineered structures, buildings, artefacts, facilities, and language and cultural components such as arts, traditions and beliefs form part of cultural heritage. However, cultural and natural heritage cannot be seen as distinct entities in some contexts, where both are very much part of the same system and are closely interconnected. Within cultural heritage, there exist several components such as dance, music and beliefs that are grouped under intangible heritage, while the monuments, sites and material culture form part of tangible heritage, which are basically archaeological sites, monuments and their environmental contexts. These tangible

and intangible classifications are artificial, and tangible objects and structures have hidden intangible cognitive spheres of cultures, such as ideology, philosophy and belief systems.

Intangible heritage and ethnic tourism are also given importance in promoting holistic tourism. Arts and crafts, dance, music and traditional ethnic ways of life are also part of history and they can be useful in understanding archaeological remains and for promoting cultural and ethnic tourism.

More than the natural heritage, it is the cultural heritage that serves as a unique source of attraction in certain contexts. Mere natural heritage attractions, without support of the cultural heritage would not make meaningful tourist destinations. The living cultures, the cuisine and the overall ways of life add to the tourist attraction. Archaeological heritage is now increasingly perceived as an important resource that can help to promote economic development in certain contexts, and contribute to the understanding and harmony among various cultures. Historical and heritage resources form valuable assets of a nation and community. In the globalized contemporary context, where urbanization and modernization have displaced communities and delinked the people from their original habitats, interest in heritage preservation assumes significance. Heritage resources have multiple roles to play in the contemporary society; they contribute to nation building, education of the youth, community integration and create a sense of belonging among the local people and cultural tourism, which gives multiple opportunities for understanding various cultures, besides the economic benefits.

The living or archaeological monuments are important, since a community builds its identity and the youth learns the importance of history through these monuments. In the modern landscape, heritage remains act as landmarks of historical achievements, and they are the centers of learning history for the young generation.

The vast heritage resources need to be researched, managed and presented to the public and tourists in an attractive and sustainable manner, and cultural tourism, provides an opportunity to disseminate the

importance of the cultural resources among the people. Archaeologists and heritage managers need to proactively work to develop meaningful resources that can benefit the society. The entire processes related to the protection and promotion of heritages form the subject matter of Heritage Management. Against this backdrop, the status and condition of the cultural heritage monuments and sites of many regions need to be researched, and strategies have to be chalked out to protect and promote the archaeological sites and monuments.

Heritage and heritage management came into focus in the post-colonial context mainly after the 1970s and after intense deliberations of various international associations and organisations mainly under the aegis of UNESCO and the developments in the Western world did play an important role. The heritage movement got a major thrust from the 1980s, and in the 21st century, it has come to occupy a prominent space in various arenas. There are developments within heritage leading to critical heritage studies (for a detailed discussion on heritage and the related developments, see, Cleere 1989; Smith 2006; Harrison 2013; Logan 2002; Paddayya 2018; Basak, forthcoming). There are a few works available on heritage management in Asian contexts and focussing on non-Western perspectives (Silva and Chapagain 2013; Silva 2016), which argue that indigenous perspectives are essential as part of critical heritage studies (Chapagain 2013), and focus on decolonisation (Ray 2018).

Indian Scenario

India has a rich variety of cultural resources that attract people from various parts of the world, and also serves as a source of belongingness for the people. India has rich variety of heritage and more than 3600+ sites and monuments have been protected at the national level and many more sites and monuments are still to be protected. Archaeological survey of India was established by the colonial rulers in 1861. The process of heritage management in the contemporary sense began from the 19th century. For a history of archaeology in India, see, Chakrabarti 1988, 1990, 1997, 2003; Paddayya 1990, 2004, 2014, 2016, 2018. However, even before the colonial period people had their own native approach towards heritage management. The sites

and monuments of India are managed by the Archaeological Survey of India, and but in several contexts more efforts are required for a better heritage management. Interests need to be developed among the local administrative bodies on the importance of heritage preservation.

India has many monuments and archaeological remains across its landscape and the issue is how these sites and monuments could be effectively managed for the benefit of the society in a sustainable manner. Due to modernization and urbanization, many of these sites and monuments, especially those which are not protected, are getting destroyed. For example, the megalithic sites are being razed to the ground, and megalithic heritage parks could be created at some of these sites for preservation. The historical information and the material remains from some of the important archaeological sites such as Arikamedu, and Chandraketugarh have not been exhibited in an attractive, interesting manner for the benefit of the public. Cultural Resource Management legislation, as it exists in many of the nations, has not been adopted in India. The World Heritage Sites are reltively better managed in India and the living monuments, e.g. Thanjavur, where different agencies work together smoothly for the management of heritage serve as good models. But, some of the protected sites too face preservation issues. Therefore, it is certain that action needs to be taken to improve the mode of heritage management in India, some of the areas where tradition and modernity fuse have pointers for the heritage management in global contexts.

Japanese Scenario

Japan is rich in cultural properties or heritage with several thousands of registered archaeological sites. Agency for Cultural Affairs (*Bunka cho*) manages the archaeological sites in Japan and the agency is under Ministry of Education. The government provides support for rescue archaeology, and rescue excavations are increasingly undertaken in Japan from the 1970s. Heritage education is also actively followed up. The beginning of heritage management in Japan dates back to mid-nineteenth century. The state of development of heritage management in Japan is considered as advanced as in the Western countries. However, scholars feel that more action needs to be undertaken for the rescue

archaeological initiatives. The number of heritage experts is considered to be very few in Japan. Scholars are of the view that more research has to be undertaken for the sustainable tourism activities.

The Symposium

Heritage management needs to be contextualized according to the cultural ethos and contexts. As heritage management is a growing area, and also has tremendous contemporary relevance, more research and interactions are essential among the academicians and managers of the heritage. India and Japan as countries with rich cultural heritage have many areas to mutually understand within the heritage management. Often the Western models of heritage management are discussed by researchers and it is important to understand the Asian approaches for heritage management. A model successful in the western world might not be applicable to the Indian context. Therefore, models practiced in Asian contexts and the issues need to be understood.

The symposium focussed on the issues concerning the management of archaeological heritage, case studies of ethnic or sustainable tourism in African and Asian contexts, covering Japan, Ethiopia (Africa) as well as archaeology and tourism in various South Asian regions. The symposium discussed along with archaeology, ethnology (preservation or sustainability of village culture such as festivals, fairs and congregations, i.e., diverse cultural aspects of contemporary society. This symposium sought to provide a platform for mutual learning and understanding in the area of heritage management. It involved mostly people who are actively in the field of archaeology, heritage management and culture as field researchers and practitioners.

Objectives

The Objectives of the symposium are

- To understand the issues concerning the management of archaeological heritage in Japan and India.
- To focus on the issue of developing archaeological heritage sites as attractive destinations that can cater to heritage education and cultural tourism.

- To focus on the issues (pros and cons) related to cultural tourism and promote the concept of sustainability in Cultural Tourism
- To focus on the intangible and ethnic tourism components
- To understand the sensitive issues related to the management of heritage
- To plan for future challenges and technology in the area of Heritage Management
- To focus on the traditional knowledge systems (arts and intangible heritage) that would help in the area of heritage management and conservation.

Themes

The symposium focussed on the following themes :

- Theoretical perspectives and policy issues related to Heritage Management

  Theoretical perspectives and policy issues are very important for providing intellectual thrust to heritage management initiatives.

- Traditional Knowledge system and Heritage Management

  Traditional Knowledge System is an upcoming research area. The application of the traditional knowledge system of the Asian countries needs to be focussed in order to develop alternate strategies of heritage management.

- Heritage Management Issues

  Heritage management issues include protection, heritage education, monument and stakeholder relationships, and the development of the context of the monuments

- Heritage Management, Protection and Development of Archaeological Sites
- Archaeological sites sometimes lie in very remote areas. The pertinent questions are: How can these sites be protected? Can

they be promoted through the development of museums? Are they viable? Some of the museums located in the remote areas receive very few visitors. How can these sites be converted into attractive tourism destinations?

- Technology in the Documentation of Heritage

  Technology is an important factor and all the more digital technology is vital for documenting and promoting heritage monuments among the people.

- Heritage Education

  Heritage education initiatives and heritage walk programs are important to disseminate the importance of heritage sites and monuments among the people

- Archaeological heritage and Sustainable Heritage Management

  Sustainable management is the key approach in the development of archaeological heritage. It is not wise to disturb the monuments and important environmental landscapes with the focus only on the economic benefits. The interests of the local people who live nearby the monuments should also be taken into consideration.

- Potential Archaeological sites for Heritage Museums

  The potential archaeological sites where heritage museums can be established.

- Ethnic Tourism

  The idea of ethnic tourism focuses on the promotion of living cultural ways of life as part of tourism promotion.

- Intangible Cultural Heritage and Arts and crafts in Heritage Tourism

  The importance of intangible heritage and crafts in promoting Heritage Tourism was one of the themes.

The papers and abstracts incorporated in this volume were presented in the international symposium on heritage management in India and Japan organised on 12, 13 and 14 February 2019 at Tamil University, Thanjavur. The members of the team visited the sites of Thanjavur and Gangaikondacholapuram and interacted with the public who participated in a heritage walk at Gangaikondacholapuram. The volume has 20 full papers and 2 abstracts of papers and the suggestions and recommendations discussed by the participants are also incorporated in this volume along with the resolutions adopted by a few of the expert participants.

Sathyabhama Badhreenath discusses the contribution of a private trust in the renovation of temples in the region of Karnataka. Renovation of ancient monuments requires enormous amounts of funds and it is just not feasible for the governments alone to generate the required funds from public sources for heritage management. Therefore, like the olden days when people's participation took place in the construction and renovation of temples, as revealed by the ancient inscriptions, people's participation can be sought in the renovation of ancient structures.

K.P. Bharathi, in his paper, presents the activities of DHAN Foundation in Madurai, which works in the areas of heritage management and tourism. His work highlights the need for creating awareness among the local people about culture and heritage through heritage walk programmes. Unless the people at the grassroots level understand the importance of heritage conservation, it is impossible to conserve the vast and diverse heritage resources of India. Heritage management is not merely an intellectual pursuit and academic theorising, and activities in the grassroots among the people and various stakeholders hold the key to the success of heritage management strategies.

D. Dayalan illustrates the connections between cultural tourism and heritage management. He highlights the issues in the management of heritage sites and problems faced in managing the tourists at the site of Taj Mahal. Proper management of tourist traffic and offering best of facilities for the visitors are very important at the heritage sites. The management of tourist inflow is not just the responsibility

of Archaeological Survey of India, but the local administrative bodies and civic administration should also actively involve in the process of tourist management of Japan.

Manabu Koiso traces the development of heritage management legislations in Japan and addresses the issues related to heritage management. He brings to focus the impact of tourism and illustrates the results of the ageing population on the heritage resources.

M. Nambirajan discusses the world heritage monuments in western India and presents the challenges faced in the management of these monuments. He argues that focus on conservation strategies, management of environment context, public outreach and involvement, tourist management, planned development and policymaking as essential requirements.

Nishizaki Nobuko presents the case study of ethnic tourism in the Lower Omo valley in Ethiopia. She argues that the freedom and autonomy of the local communities has to be respected, while at the same time proper policies are necessary for effective management of ethnic tourism.

Atsushi Noguchi discusses the conservation of cultural heritage and tourism sectors in Pakistan. He traces the role of various agencies in heritage management. His work brings out the perceptions of heritage resources from a detached perspective, as archaeological materials and also as ritual or sacred vestiges.

S.B. Ota, based on important investigations undertaken around the prehistoric site of Bhimbetka, dwells on the management of heritage landscapes and working on the garbage produced during the festivals of the natives of the region and presents the ideas for managing the environs of heritage sites with the cooperation of the local communities. He argues for a special relaxation of certain provisions in the forest regulations for the native communities. His work brings to the point the importance of meaningful intervention in managing the contexts of landscapes around the sites and monuments with the support of the local people. It also highlights that the heritage managers should

not only understand the heritage sites, but also the social and cultural contexts of the living communities.

K. Paddayya argues that a subaltern approach to the archaeological record in the sense of preserving the small sites requires focus. He suggests the involvement of various stakeholders and the application of latest theoretical approaches in archaeological investigations.

Shanti Pappu and Kumar Akhilesh highlight the importance of archaeological sites in heritage management and the role of experimental archaeology oriented education in lighting up the young minds. They stress on the importance of combining 'research goals with those of policies for site conservation and public archaeology'. They bring to focus the positive and negative aspects of the involvement of over-enthusiastic amateurs in heritage-related activities. They emphasise the importance of training the young researchers in new approaches to archaeological research.

V.N. Prabhakar describes the rock-cut caves of western India at Ajanta, Ellora and Pitalkhora and elaborates the conservation issues in the context of geological investigations. This work highlights the need for scientific studies and understanding in the conservation of archaeological sites and monuments.

S. Rajavelu highlights that the elements of indigenous perspectives of conservation and archival practices began much earlier in history and presents indigenous approaches to the preservation of epigraphical records, based on the survey of inscriptions. Every culture had developed its own approach to manage heritage, and we should not imagine that the whole gamut of ideas of heritage management came up all of a sudden. There is a need to relook and rediscover the gems of wisdom found in the ancient inscriptions and texts and use the relevant ideas for contemporary heritage management, adopting a no-nonsense approach.

T. Satyamurthy focuses on the importance of the traditional, indigenous methods and techniques in conservation. He lists the efforts

on conservation as gleaned from inscriptions and ancient texts. The exploration of native indigenous practices is very important in the conservation of archaeological heritage. The non-Western or Asian or local practices could be very cost-effective in the management of heritage. Therefore, local knowledge, cultural practices and traditional knowledge systems have to be researched for understanding heritage preservation issues.

V. Selvakumar presents a bird's eye view of the heritage management scenario in India and highlights the measures that are essential for improving the heritage management practices.

Y. Subbarayalu discusses the efforts of a large team in preparing an online digital historical atlas on South India. In this age of digital revolution, digital media and GIS help to organise and present information to the public and students. There is an urgent need to create databases on heritage sites and this is very essential for adopting appropriate heritage management strategies.

S. Suresh dwells upon comparative perspectives of heritage management in India and the United States. He correctly highlights that India does not have adequate skilled human resources for effective heritage management.

Hitoshi Takanezawa focuses on the cultural festivals and their significance in heritage preservation in Japan, especially in rural contexts. He presents the case of tourism supporting heritage preservation, and the collaboration of university students for cultural heritage preservation.

Bina Thomas, who actively works with the community on heritage education and awareness, presents the case study of Heritage Walk Trivandrum (HWT), which is a voluntary attempt of several like-minded heritage enthusiasts in exploring the microhistories, rather than concentrating on the grand monuments. Here we notice a link between the 'Taj Syndrome' presented by Shanti Pappu and Akhilesh Kumar and the 'subaltern' approach elaborated by K. Paddayya. Apart from the meta-level narratives, reconstruction of local histories or village

histories is essential and the reconstruction of such local histories could be offered as a method of offering training to the post graduate students in history and archaeology.

Tomokatsu Uozu discusses the heritage management process in Japan. He discusses the process of heritagisation and cryptopreservation programmes for archaeological resources, and sustainable maintenance and utilisation.

A. Vadivudevi, who is an artist, narrates the importance of Bharathanatyam, a traditional dance of South India. She explains the transformation of this art form and its widespread popularity. The development of interest among the youngsters in learning this art form suggests the manner in which people seek to look at the heritage and relearn traditional practices in the contemporary context. She enlists the measures necessary for sustaining this traditional art form.

Vinodhan and Meera present the issues related to cultural tourism and the measures necessary for archaeological heritage management in the context of tourism. Tourism sector focuses on the consumers of heritage monuments and this sector needs to actively engage with the heritage managers to facilitate the management of tourist inflow to the monuments.

The papers and abstracts presented in this proceedings offer insights into the multiple dimensions and issues in heritage management in the context of India and Japan and also the issues concerning ethnic tourism in Ethiopia. These three regions present different contexts and issues; there are areas where these regions can learn from the heritage management practices. For example, the involvement of students of university in the celebration of traditional festivals in Japan could be adopted for the maintenance of the context of archaeological sites and monuments India and for creating heritage awareness, with proper supervision and guidance. The model of ethnic tourism could be adopted in some contexts of India, after proper assessment of the impact over the indigenous communities. The papers presented in the symposium highlight the need for pluralistic approaches and context-

specific heritage management strategies. This proceeding is an attempt to highlight certain aspects related to the heritage management issues, and it has touched upon only a few of the issues. There is a need to enhance the manner in which heritage management is practiced in many contexts of the world, by adopting various indigenous approaches and incorporating the ideas of various stakeholders.

References

Basak, Bishnupriya. Forthcoming. *Re-thinking Heritage: creating a new sense of the past?* South Asian archaeology: From the Palaeolithic to the present (Essays in Honour of Professor K. Paddayya).

Chakrabarti, D.K. 1988. *A History of Indian Archaeology: from the Beginning to 1947.* Delhi: Munshiram Manoharlal Publishers.

Chakrabarti, D.K. 1990. *India: An Archaeological History.* Delhi: Oxford University Press.

Chakrabarti, D.K. 1997. Colonial *Indology: Socio politics of the Ancient Indian Past.* New Delhi: Munshiram Manoharlal Publishers.

Chakrabarti, D.K. 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947.* New Delhi: D.K. Print world (P) Ltd.

Chapagain, Neel Kamal 2013. Introduction: Contexts and Concerns in Asian Heritage Management, in *Asian Heritage Management: Contexts, Concerns, and Prospects.* (Kapila D. Silva and Neel Kamal Chapagain Eds.), pp. 1–30. Oxon: Routledge. Routledge Contemporary Asia Series.

Cleere, Henry Ed. 1989. *Archaeological Heritage Management in the Modern World.* New York: One World Archaeology.

Harrison, Rodney 2013. *Heritage: Critical Approaches.* London: Routledge.

Logan, W.S. (ed.) 2002. *The Disappearing 'Asian' City: Protecting Asia's Urban Heritage in a Globalizing World*. Oxford: Oxford University Press.

Paddayya, K. 1990. *New Archaeology and Its Aftermath: A view from Outside the Anglo-American World.* Pune: Ravish.

Paddayya, K. 2004. *Recent Studies in Indian Archaeology.* Indian Council of Historical Research Monograph, 6. New Delhi: Indian Council of Historical Research.

Paddayya, K. 2014. *Multiple Approaches to the Study of India's Early Past: Essays in Theoretical Archaeology.* New Delhi: Aryan Books International.

Paddayya, K. 2016. *Revitalizing Indian Archaeology: Further Theoretical Essays.*New Delhi: Aryan Books International.

Paddayya, K. 2018. *Indian Archaeology and Heritage Education: Historiographical and Sociological Dimensions*. New Delhi: Aryan Books International.

Ray, H.P. 2018. *Decolonising Heritage in South Asia: The Global, the National and Transnational.* New Delhi:Routledge India.

Silva, Kapila D. 2016. Paradigm Shifts in Global Heritage Discourse. *KUscholar Works-Architecture and Design Scholar Works.* Url: https://kuscholarworks.ku.edu/handle/1808/21181, accessed May 2019.

Silva, Kapila D. and Neel Kamal Chapagain 2013. *Asian Heritage Management: Contexts, Concerns, and Prospects*. Oxon: Routledge.

Smith, L. 2006. *Uses of Heritage*. Abingdon, Oxon: Routledge.

2. Resuscitating Heritage: Community-Based Approach

Sathyabhama Badhreenath

Abstract

Temples dot the landscapes of many of the towns and villages in South India and they are a part of the religious activities of the people living around them. Migration of people, poor maintenance, age of the structure and lack of adequate funds are the main reasons why the ancient temples are neglected and allowed to fall into ruins. To restore the temples to their ancient condition and also involve the people in their structural and religious maintenance, the Dharmasthala Manjunatheswara Dharmothana Trust, Dharmasthala, Karnataka, under the stewardship of Shri Veerendra Heggade, undertakes the restoration of the ancient temples. The motto of the Trust is 'Giving back to posterity... What history bequeathed us'. This paper highlights the community-based approaches of the Dharmasthala Manjunatheswara Dharmothana Trust leading to sustainable cultural heritage development.

Keywords: Heritage Management; Community-based Heritage Management; Karnataka; Dharmasthala

Temple building in India was a multifaceted activity involving art, science and religious components and every village in India has a temple of its own, small or big. With the loss of royal patronage, migration of people from villages and small towns to cities, poor maintenance, age of the structure and lack of adequate funds, the maintenance of these temples became an arduous task and many of the temples have fallen into neglect (Bhadreenath 2014).

Most of the important temples and famous religious centres are under the control of the state governments, while the maintenance of historically and archaeologically important temples is under the control of the Departments of Archaeology, both at the Central and state level. Monuments of such category are often not neglected as they are

under the custody of the government agencies. The others that were once temples of local importance, but are not under the custody of the government at the present are the totally neglected lot.

Some private trusts and organisations are striving hard to redeem this stalemate and to restore the ancient temples to their former status. One such significant contribution towards the rehabilitation and management of ancient temples is undertaken by the Sri Dharmasthala Manjunatheswara Dharmothana Trust, Dharmasthala, Karnataka. This paper highlights the community-based approach of the Trust, leading to sustainable cultural heritage development.

The President of this Trust, Padmabhushana Dr. Veerendra Heggade, who had already initiated projects for rural improvement, health and educational institutions, was 'pained to see' the beautiful monuments that once basked in glory being trampled by time and forgotten by humanity to lie in ruins, uncared and unheard of' during his many travels into the hinterland of Karnataka.

Fig. 1. Lakshminarayana Temple, Tagadur (before conservation), Source : author.

Fig. 2. Lakshminarayana Temple, Tagadur (during conservation), Source : author.

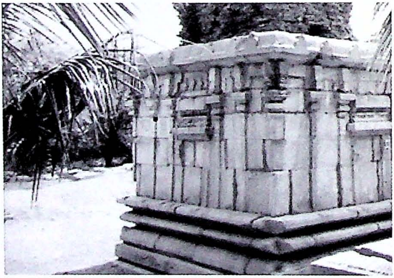

Fig. 3. Lakshminarayana Temple, Tagadur (after conservation) , Source : author.

Added to this was the fact that when he was invited for the *pratishthapanas* (inauguration) of various religious centres and temples, he noticed that the old structures were demolished and rebuilt using brick and mortar. He longed to restore the former glory of these beautiful architectural monuments.

Such a thought saw the birth of the Trust with the motto 'Giving back to posterity...What history bequeathed us'. The Trust was formed in 1991 at Dharmasthala and has dedicated itself to the restoration and revival of our ancient culture. While preserving ancient architecture is one of its main objectives, it also promotes the classical traditions and methodologies of worship, *bhajans* (religious renderings) and *pujas*. The Dharmothana Trust has been created to identify the ruins of temples and restore them as close as possible to their original glory.

The Method

An advisory board of eminent personalities in the fields of art, religion, culture has been constituted with the overall vision to restoring ancient heritage. The actual work of restoration is handled by a team of dedicated professionals like engineers, archaeologists, historians and *sthapatis* (architects).

Fig. 4. Nishkameshwara Temple, Hosakote, Source : author.

The local people approach the Trust with details of the temples in their villages that are in a dilapidated condition. If the temple is more than 200 years old, and also non-living, a team of experts is deputed by the Trust to assess the condition of the temple. The locals are involved both in monetary contribution towards the renovation of the temple and also in providing manpower during execution.

Only on the condition that the locals would fully cooperate, the work is identified as a potential project. Once the team certifies that the renovation would meet the guidelines of the Trust, the President Veerendra Heggade himself interacts with the local populace. The local people are requested to form a committee, collect 20% of the amount required and start the preliminary work to establish their genuineness. The next team surveys the site and formulates the report to take up the execution of the work. On detailed documentation and preparation of estimate and on the basis of *vastusastra*, the renovation work is undertaken.

The locals are involved for two reasons. First, they are better aware of the local topography and the folklore of the area, which indirectly aids the restoration process. Second, by involving them, the Trust instils in them a sense of responsibility and pride by which they would proudly preserve and maintain the temple. As financial partners, their involvement is further established.

Initially for nearly a decade, the Trust was contributing a substantial amount for the renovation process. Subsequently, its efforts were appreciated by the government of Karnataka, which also decided to join hands with the Trust. Today, the Trust and the government contribute 40% each and the balance 20% is the contribution of the locals. Even though the government decided to become partners, it does not interfere with the work of the Trust, which has retained its freedom of execution.

Over the last two decades, the Trust has renovated around 190 temples all over Karnataka. Some of the temples renovated include the Sri Someshwara temple, NAL, Bangalore district; Sri Shanthinatha Basadi,

Bangadi, Belthang taluk, D.K. district; Sri Chandralaparameshwari temple, Honagunte, Chithapura taluk, Gulbarga district; Sri Laxminarasimha temple, Doddakunche, Holenarasipura taluk, Hassan district; Sri Nishkameshwara temple, Hosakote, Pandavapura taluk, Mandya district; Sri Lakshminarayaṇa temple, Tagadur, Nanjangud taluk, Mysore district, to name a few. In all these restored temples, the historicity and original features have been maintained.

On completion of the restoration work, the temple and the deities are consecrated as per the *Agamic* principles and handed over to the villagers in all pomp and glory. The responsibility of the Trust ceases and the mantle of ensuring the maintenance of the temple and performing the rituals are transferred to the local people.

As a part of field study, I had visited two temples that were restored by the Trust: Sri Nishkameshwara temple, Hosakote, Pandavapura taluk, Mandya district and Sri Lakshminarayana temple, Tagadur, Nanjangud taluk, Mysore district. The temples have been conserved as per the *Agamic* principles and most of the old materials have been reused. The place has also become a centre of vibrant activity. The locals with whom I interacted were also very proud of their temple and also about their contribution in reviving their totally lost temple.

In certain instances when the villagers themselves request for intervention, the Trust intervenes and associates itself with the *puja* activities. A case in instance was that of the Jain temple at Ullala situated to the south of Mangalore in a predominantly Muslim locality. The temple was renovated but no priest could be identified to perform the daily *puja*. When the Trust was approached, a person was suggested for performing the *puja*. As the income was insufficient for the priest, the Trust donated a rickshaw to him to earn his livelihood. The temple has today become a landmark of the town and has fostered religious harmony.

The Trust is, however, very clear in its principles of confining its activities to restoration work and does not involve itself in any of the religious activities subsequently.

Positive Outcome

The outcome of this community-based approach has started to pay dividends and these centres have now turned into active places of worship. Sometimes village functions and fairs also are held in its premises. The temple has become an integral part of the daily life of the village and some have also started attracting tourists.The initiative of the Dharmothana Trust has created awareness among the people even in remote areas about the architectural marvels that one has inherited and the necessity to safeguard such places. By restoring the ancient temples, the dilapidated architectural remains and sculptures are once again brought back under worship, indirectly preventing the theft and smuggling of sculptures or architectural wealth.

In fact, it has become a people's movement with a large number of the local people involving themselves in the revival of culture and cultural wealth.

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References

Badhreenath, Sathyabhama, 2014. *Management of Living Heritage sites with special reference to South India.* Unpublished Ph.D. thesis. Pune: Deccan College.

3. Empowering the Custodians of Heritage Sites and Redefining the Roles of Community in Heritage Management: A Case Study of DHAN Foundation

K.P. Bharathi

Abstract

The heritage resources of India, both tangible and intangible, are fast disappearing because of the changing socio-economic profile of the country. Much of the local community is not aware of the importance of protecting the wealth of its heritage. The local people are also unaware of the historical and archaeological importance of their villages, and that the heritage resources may contribute to sustainable growth through tourism. From 2008, the DHAN (Development of Humane Action) Foundation has been organising heritage walk programmes through its Tourism for Development unit to promote heritage literacy among the public in various parts of Tamil Nadu. The DHAN Foundation named 2008–09 as the 'Year of Heritage'. The ongoing heritage walk programmes for the sustainable development of heritage resources in various districts of Tamil Nadu and the World Heritage and Culture Lecture Series are some of the important initiatives of the DHAN Foundation. Memoranda of understanding (MOUs) and collaboration with various educational institutions such as Tamil University, Pondicherry University, INTACH and individual scholars and experts for heritage development are some of the other initiatives of the DHAN Foundation. This paper highlights the initiatives of DHAN Foundation in promoting an awareness about heritage through various measures among the communities in various parts of Tamil Nadu.

Keywords: Heritage Walk, Heritage Education, Heritage Management; Heritage Awareness Programmes; Heritage and Development

1. The Context

Many of the Indian heritage resources (both tangible and intangible) are fast disappearing because of changing socio-economic profile of the country and poor heritage literacy among the host communities. Lack of livelihood opportunities in many of the villages that possess heritage resources often leads to migration of people to the nearby urban centres. Most of the local community is neither aware of the importance of protecting its heritage wealth nor has the resources necessary for preserving these valuable resources. The local people are also unaware of the historical and archaeological importance of their villages and that the heritage resources may contribute to sustainable growth through tourism. While in the World Economic Forum's world competitiveness index for cultural resources India enjoys a very high 9th rank in 2017, in the Human Resources and Labour Mark Index, it is placed at the 87th position in 2017;[1] this vast gap shows the enormous opportunity for the development and utilisation of the cultural resources. India has 37 UNESCO endorsed world heritage sites, 3650+ national heritage sites protected by the Archaeological Survey of India (ASI), while the state-level protected archaeology sites by the Tamil Nadu State Archaeology Department are 96 in number. However, an estimate reveals that more than 5 million religious and heritage sites require care and protection from the central and state agencies. The DHAN (Development of Humane Action) Foundation as a voluntary organisation has worked at various levels with communities to create awareness about heritage preservation. Several voluntary sector organisations are working in India for creating awareness among people on heritage and it is not the intention here to present a survey of these institutions and their contribution. This paper takes up DHAN Foundation as a case study and presents the initiatives undertaken by this institution and the experience it has gathered from its involvement in the grassroots.

DHAN Foundation (www.dhan.org and www.developmenttourism.in) named 2008–09 as the 'Year of Heritage'. The year-long celebrations of heritage and action programmes related to heritage have resulted in creating an understanding about the importance

1. Source: reports.weforum.org/travel-and-tourism-competitiveness-report-2017, accessed May 2019.

of cultural heritage among various communities in different parts of India. These programmes have also focused on the documentation of local heritage and integrating them into the development programmes. DHAN Foundation views heritage as very much a living idea – it is about the present and the future as much as the past. DHAN believes that the past would give, in some way, a lesson for the present and future. Our experience at the community level has enabled us to develop the following ideas:

- It has emerged from our experience that intangible heritage (software) is very important for sustainable development with tangible heritage (hardware), and for the use of intangible heritage for development, the community and various stakeholders have to collaborate.
- Since the role of school children, college students and village youth are very important for the sustainable development of the local heritage, a strong orientation with heritage education as a part of the school/college curriculum is important to divert their focus from spending more time on the e-gadgets.
- For sustainability, the organised people-centred institutions have to take charge of this responsibility with networking of various stakeholders. The *panchayats* have to take up the role of local policymakers for the sustainable development of their own heritage resources.
- Advancement with the promotion of local tourism circuit is vital to support the livelihoods for the sustainable development of heritage.
- However, all the stakeholders and communities have to realise that social well-being oriented development is more important than their intellectual and material development for sustainability.

DHAN Foundation's 'Tourism for Development' theme is an outcome of the four-year pilot project 'Endogenous Tourism for Rural Livelihoods' implemented by it in Karaikudi and Kazhugumalai in Tamil

Nadu with the support of United Nations Development Programme (UNDP) and the Government of India. One of the key learnings in the project was that the diversified livelihood opportunities that exist in the tourism sector can contribute to poverty reduction.

2. Conserving Heritage through Heritage Literacy: DHAN Foundation's Initiatives

The ongoing heritage walk programmes for the sustainable development of heritage resources in various districts of Tamil Nadu and the World Heritage and Culture Lecture Series are two of the important activities of the DHAN Foundation. Memoranda of understanding (MOUs) and collaboration with various educational institutions such as Tamil University, Pondicherry University, Indian National Trust for Art and Cultural Heritage (INTACH) and individual scholars and experts for heritage development have been implemented. The programmes of DHAN foundations include the following:

- Heritage village network for heritage development
- Collaborative action and contribution of heritage development in little known historically important locations of Thanjavur district
- Heritage resilience among students through innovative Life Frontier Education
- Building heritage awareness among host communities and students of Madurai
- Learning heritage and promoting local tourism as inclusive development through internship activities with the Pondicherry University
- Village development through heritage.

3. Heritage Walk for the Sustainable Development of Heritage Resources in Tamil Nadu

From 2008, DHAN Foundation has been organising heritage walk programmes through its Tourism for Development unit to promote heritage literacy among the public in various parts of Tamil Nadu.

Fig. 1. Madurai Heritage Walk Brochure, Source : Author

The heritage walk programmes create awareness among the host communities and help them to understand the historical and archaeological importance of their villages. During the heritage walk programmes, which are arranged at different historical sites, the historical importance and archaeological significance are presented to the public by eminent historians and archaeologists by offering simple lectures, explanations, demonstration, stories, answering queries and documentation including brochures on heritage and history (Figs. 1-2).

The response of the local community has been very encouraging due to the simplified presentation of historical information from the inscriptions, social context and stories associated with temples and sculptures. The local people finally have begun to understand the heritage value of their neighbourhood. They have become aware that they have to preserve their heritage and contribute to the maintenance of the temples and environment of the villages. Collaborative action and contribution of heritage development in little known historically important locations of Thanjavur district has been undertaken in collaboration with Dr. S. Rajavelu and Dr. N. Athiyaman from the Department of Maritime History and Marine Archaeology, Tamil University, Thanjavur. So,

Fig. 2. Heritage Walk at Kailasanatha temple, Saylkudi, Ramanathapuram District, Source : Author

for DHAN Foundation has organised more than 300 heritage walks in 210 little known heritage sites in Madurai, Thanjavur, Tirunelveli, Sivagangai, Kanchipuram and Ramanathapuram districts of Tamil Nadu (Figs. 3-5).

4, Lecture Series on World Heritage and Culture

Now DHAN Foundation is organising a monthly lecture series on World Heritage and Culture for the benefit of Madurai citizens, especially students, younger generation and interested individuals who wish to promote our traditional culture and heritage with the purpose of inculcating moral development, which is superior to intellectual and material development. This event is organized from 5 to 7 p.m. on every second Sunday of each month at the conference hall of DHAN Foundation. So far, 67 such events have been organised from 14 April 2013 to January 2019.

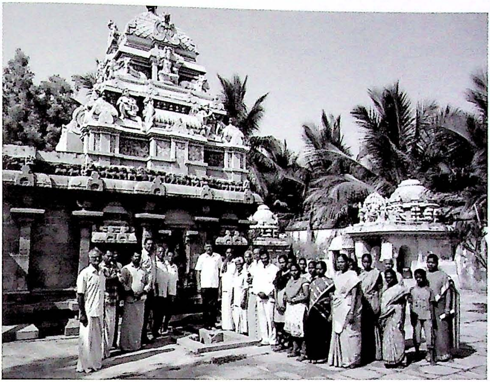

Fig. 3. Heritage Walk at Koil Devarayanpettai, Thanjavur District, , Source : Author

5. Educational Social Responsibility and Heritage Development

With a view to promote educational social responsibility and heritage development, the DHAN Academy, which is a development management institution of DHAN Foundation, Madurai, initiated heritage events from 2012. The past seven editions of heritage events were organised at Keezhamattaiyan, Thenkarai, Thiruvedagam, Thenur, Kodimangalam, Thuvariman and Vikramangalam in Madurai district with creative and innovative ideas, which would be recognised to identify the village culture and traditional knowledge, and people from the local community would also share their wisdom with younger generations from the Madurai region. A heritage council consisting of members from the colleges and experts in the field of heritage to draft policies at panchayat level will be formed, resulting in valuing the heritage aspects at the grassroots.

6. Promoting Local Tourism Circuit as Inclusive Development

Our heritage villages in India are unique in their history,

Fig. 4. Heritage Walk at Marudur, Madurai District, Source : Author

archaeology and culture. The Local Tourism Circuit (LTC) is formed for the promotion of the lesser known sites among tourists. These heritage and cultural sites have a universal value – they belong to all and must be protected by all. The objective is to promote public-private-community partnership in heritage conservation, to share the expertise, to train and capacity building and to create awareness all under the theme of dissemination and heritage literacy (Fig. 5). LTC is for sustainable development involving local community so that tourism can prevail in a longer run.

The measures will also be a tool to spread the tourism benefits to various districts of Tamil Nadu, which would also lead to protection of the culture and tradition of the villages. The diversity and uniqueness of villages of India can be experienced through this initiative. Heritage preservation will also give livelihood opportunity for the poor community, which in turn promotes the sustainable development of heritage sites. So far, the students of Pondicherry University through their summer internship activities explored this initiative in Madurai, Theni, Nagapattinam and Thanjavur districts. In these initiatives, SHG federations, local panchayat, district administration, Defence Research

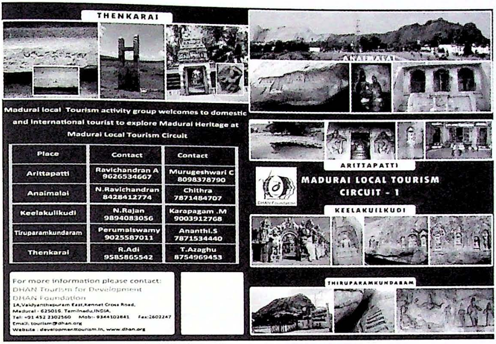

Fig. 5. Madurai Local Tourism Circuit Brochure, Source : Author

and Development Agency (DRDA), DHAN Foundation, INTACH, ASI, Tamil Nadu State Archaeology, host community organisations, tourism Department, National Bank for Agriculture and Rural Development (NABARD) and other corporate social responsibility (CSR) institutions are also involved. The major focus of this network is to help identify measures through which the local community would benefit from initiatives concentrated on heritage conservation, integrated with inclusive economic development programmes. Direct and indirect impact from conservation activities increase the economic value of heritage and help create employment opportunities. The development of public infrastructure of the villages and increased demand for production and consumption of cultural goods, craft products and services could be realised as well.

7. Heritage Resilience among Students by the Innovative Life Frontier Education

Under this programme, the college students are given training and orientation on heritage as an extra-curricular activity. Many positive changes have happened among the participating final year history students of Lady Doak College, who took an active part in this

programme for the last four years. The combination of the experience of village community and the academic knowledge of students brings positive attitude towards learning and understanding heritage and work for its development. This understanding made them to practice the value of culture and tradition at the levels of self and family. Their understanding on the team effort and collaboration with the community is the way forward for the sustainable development of heritage and culture.

8. Heritage Conservation and Development

India has more than 6,00,000 villages. Each village is unique in its culture and diversity of heritage. Village development can be connected with heritage and tourism development by way of village cultural immersion activities for the domestic and international tourists. The various types of village cultural immersions like development tourism, village tourism, rural traditional cooking immersion, coastal cultural immersion and tribal cultural immersion organised in various part of Tamil Nadu would facilitate overnight accommodation, which would be available within the villages and would support local tourist guides. Traditional cuisines would be provided on the site and local crafts (including souvenirs) would be available at the site. Developing a people's charter for sustainable tourism, forming institutions for governing tourism, setting up interpretation centres and developing promotional material would also form part of this activity. Further, they would help bring about behavioural change in the minds of people such as heritage is a shared resource, everyone should participate in heritage conservation, understanding the significance of heritage is vital and heritage should be managed to sustain their values.

9. Redefining the Role of Community: Way Forward

Based on the experience of DHAN Foundation and interactions with various institutions, experts, stakeholders and communities, the following measures are suggested for improving the role and contribution of community in heritage management (Elia and Ostovich 2011) and cultural tourism (Allchin 1969; Raj *et al.* 2013).

- Heritage Literacy: Each district has its own heritage assets. Archaeologists and historians in the vicinity of the heritage

sites can come forward for collaboration on heritage literacy, which will result in sustainable protection of heritage sites and sacred places.

- Development of heritage policies at the village level.
- Community groups for heritage and temple protection.
- Annual audit of heritage structures by the local community.
- Networking with stakeholders.
- Institutional social responsibility similar to CSR.
- PPCP (Public-private-community partnership/non-political PPCP model).
- Sacred places are not for commercial activities.
- Annual risk management of sacred places.
- Consulting the experts and transparency with community before making any modification of the heritage structure or allowing it to be used for purposes other than its intended use.
- Promoting and developing local heritage and cultural route (LHCR), which facilitates the visibility of minor sites in the village to design products and interventions.

References

Allchin, Raymond 1969. Cultural tourism in India: its scope and development with special reference to the monumental heritage: India - (mission) May 1969, Url: https://unesdoc.unesco.org/ark:/48223/pf0000008820_eng, accessed 25 April 2019.

Elia, Ricardo and Marta E. Ostovich 2011. Heritage Management, in *Oxford Bibliographies Online: Classics,* Dee Clayman ed. Url:http://www.oxfordbibliographies.com/view/document/obo-9780195389661/obo-9780195389661-0119.xml, accessed May 2019.

Raj, Razaq, Kevin Griffin and Nigel D. Morpeth 2013. *Cultural Tourism.* Oxfordshire: CABI.

4. The Nexus between Heritage Management and Cultural Tourism in India with Special Reference to the Taj Mahal, Agra

D. Dayalan

Abstract

Tourism in India essentially revolves around cultural properties. Cultural tourism, in fact, plays a vital role in conserving and realising the value of our heritage and at the same time generating employment and investment opportunities. It is also a dynamic means of cultural exchange, promotion of understanding and cultural diversity. However, tourism and its associated activities sometimes pose problems for historical places, sites and monuments and cultural properties. Many historic places have to face the issues of congestion, wear and tear and disturbance, giving a sense of displacement among some of the local public. The paper discusses in detail about the nexus between heritage management and cultural tourism in India with special reference to the Taj Mahal, the most visited historical monument in India.

Keywords: Cultural Heritage, Heritage Management, Cultural Tourism, Conservation, Taj Mahal, Sustainable Tourism

India is a repository of rich cultural heritage, which dates from the prehistoric to the contemporary periods. It is one of the few countries in the world that thrives on the principle of unity in diversity. From the natural and geographic to cultural resources, to the diverse linguistic to religious traditions, overwhelming to some and deeply comforting to many, India truly holds a great treat for the senses. The diversity of culture and heritage in the country is not only a matter of great pride but also an exceptional source of spiritual and intellectual richness for the entire humankind. The cultural properties are broadly classified as tangible and intangible by a school of thought for the sake of academic convenience, although they are interrelated. Tangible properties are historical buildings, sculptures, manuscripts, paintings and structures of historical and aesthetic value. Intangible properties

are music, drama, dance and traditional skills such as handicrafts. The wide range of cultural heritage of India includes pre-historic rock-shelters, Harappan settlements, megalithic monuments, rock-cut caves, monoliths, stupas, monasteries, chaityas, temples of different religions and styles, mosques, tombs, churches and chapels, gurudwaras, Jewish synagogues, cemeteries, forts, palaces, bathing-ghats, reservoirs, bridges and many other innumerable varieties of cultural vestiges. The variation in the cultural heritage of India is mainly due to the geographical location, time period, builder's choice, architectural style and various regional cultural and religious traditions.

Heritage Management

Heritage management is an important area of research necessary for proper preservation of heritage resources. Let us briefly look at the principles related to conservation and heritage management. The purpose of an appropriate heritage management mechanism is to ensure effective protection of cultural properties for the benefit of present and future generations and also to maintain the authenticity and integrity of the cultural properties to the maximum possible extent. Cultural heritage management is a measure aimed at ensuring the viability, identification, documentation, research, preservation, protection, promotion, enhancement, transmission as well as revitalisation of cultural heritage. It is about striking a balance between developing the tourism industry and generating revenue, while conserving the physical integrity of the monuments and promoting and celebrating their educational, historic and cultural values.

The poor condition of any monument can often be attributed to the lack of a proper management plan and inadequate resources for maintenance, monitoring or enforcement of sound management principles in practice. Lack of resources is a primary reason for poor conservation outcomes in several contexts. In many developing countries, budgets for cultural heritage conservation are understandably limited, and the restricted funding often results in inadequate staffing levels, training and equipment for adopting effective heritage management. Even if a management plan exists for a site, there may be little hope, if it is not implemented properly. Low morale among the staff due to inadequate funding, inadequate understanding about

the importance of maintaining heritage assets and cultural preferences that favour other short-term objectives and economic benefits over site management can also adversely affect the condition of a heritage site. Insufficient expertise can often lead to unscientific restoration, which is one of the most debilitating threats to heritage resources. Despite the Athens, Venice, Nara and Burra charters and the guidelines issued by the International Council on Monuments and Sites (ICOMOS), United Nations Educational, Scientific and Cultural Organisation (UNESCO) and other organisations, aggressive restorations were executed at many monuments without caring much about the integrity and authenticity of the cultural heritage in different parts of the globe.

In the recent years, the threat to the monuments and the archaeological sites and their environs has intensified considerably, due to the construction of multipurpose dams, roads, unabated urban growth, population growth and various other development activities, including unsustainable tourism-oriented development. Sometimes unscientific or improper activities also pose threat to the monuments and sites. There is also a threat to monuments posed by air pollution, changes in weather conditions and unplanned development. To safeguard the cultural properties from the above threats and to pass on the rich heritage resources to the future generations and at the same time to ensure and obtain economic benefits, conservation and maintenance of the monuments and the archaeological sites are certainly essential.

Therefore, there is an absolute need of a proper management system for the protection and preservation of cultural heritage. The management mechanism should incorporate traditional technological practices, existing urban or regional planning instruments and other planning control mechanisms, both formal and informal.

The management mechanism should be so structured as to achieve the following common elements:

(i) the active involvement of partners and stakeholders in the management of cultural properties;

(ii) a thorough shared understanding of the ancient monument or archaeological site and remains by all stakeholders;

(iii) a cycle of planning, implementation, monitoring, evaluation and feedback;

(iv) the allocation of necessary resources;

(v) an accountable, transparent description of how the management scheme functions and

(vi) capacity-building among the concerned professionals.

The management of cultural properties can be dealt under the following headings:

- Conservation management
- Disaster management
- Management of the ambience of the monument
- Tourism and Visitor management
- Sustainable usage and rehabilitation of monument
- Management of illegal/unauthorized activates including hawkers and touts.
- Generating funds for conservation and maintenance
- Capacity building
- Cultural awareness

Conservation of tangible cultural heritage includes all acts that prolong the life of the heritage property from any further decay without changing its character. The historical value and material authenticity of the cultural property has to be safeguarded through this process. The minimum affective action is always the best. If possible, the action should be reversible and should not hamper a possible future intervention. The conservation work should only be taken up after proper study of the causes of the decay and deterioration, documentation in the form of drawing and photography and involvement of multidisciplinary specialists. The condition of the building, the material used, method of construction and the technology adopted in the ancient times have to be fully documented before undertaking any conservation effort. All the

methods and material used during treatment must be fully documented. To the maximum extent, the existing materials should be retained. Any intervention should be in conformity with the aesthetic, historical and physical integrity of the cultural property.

Cultural Tourism

India's rich cultural, historical, religious and natural heritage resources provide a huge potential for the development of tourism in the country. A large number of both national and international tourists visit the historical monuments and sites for various reasons such as recreation, education, information, entertainment and research. India registered roughly 10.5 million international tourist arrivals in a year (i.e., 2017), excluding non-resident Indian (NRI) arrivals and transit arrivals. The total contribution of travel and tourism to the country's GDP is 9.4% (US $ 234.3 billion or INR 15,239.6 billion) in 2017. India was ranked 7th among 184 countries in terms of travel and tourism's total contribution to GDP in 2017. On the employment generation front, having supported 40.5 million direct and indirect jobs in 2017, the travel and tourism industry accounts for almost 9.3% of the total employment in India.[1]

Cultural tourism plays a vital role in conserving and realising the value of our heritage, and generating employment and investment at the same time. It is also a dynamic route for cultural exchange, promotion of understanding and cultural diversity.

Tourism supports many historic places in the following ways:

- Generating economic value and contributing to local, regional and national income;
- Raising the image and profile of the town as a place to visit, live and invest;
- Bringing back the derelict historic buildings into productive use;
- Creating reasons to invest in the town's heritage, as the

1. The details are based on the Report of Tourism Department, Government of India.

place becomes economically prosperous due to the visit of a large number of tourists and their expenditure;

- Increasing the use of local facilities and services, which helps their viability, particularly in smaller towns and villages;
- Helping to keep alive the local traditions and events;
- Supporting to market the locally produced food, drink and crafts to visitors and
- Creating job opportunity for the local communities.

However, tourism and its associated activities sometimes pose threats to historic places, monuments and sites. Many historic places have to face the issues of congestion, wear and tear, disturbances and a sense of displacement among some of the local people. Worldwide tourism to global heritage sites is increasing considerably in the recent years. The rapid growth in international and domestic tourism has engulfed the most significant and fragile global heritage sites. But, many archaeological and cultural heritage sites in the world are being used as "cash cows," without corresponding reinvestment of tourism proceeds in the heritage asset's long-term protection and preservation. There are several monuments in different parts of the country, which are popular tourist destinations and are under stress due to unorganised tourism activities. Therefore, there is an urgent need to identify all causes of the stress to heritage sites and address them appropriately. One of the principal threats to the monuments or archaeological sites is the failure to plan to properly deal with mass tourism. The Taj Mahal and Fort at Agra, the Qutb complex and Red fort in Delhi, the group of monuments at Mamallapuram (Tamil Nadu), Khajuraho (Madhya Pradesh), Bhubaneswar (Odisha) and Hampi (Karnataka); the Sun temple at Konarak (Odisha), the monuments in Jaipur and many other monuments are facing the problems of wear and tear, vandalism and other distresses due to over-visitation and misuse by the visitors (Fig.1). Notwithstanding, the tourism is economically an important activity, but at the same time, it should not be promoted at the cost of cultural heritage. The goal of sustainable tourism is to maintain a balance between these extreme situations. There should be an apt management

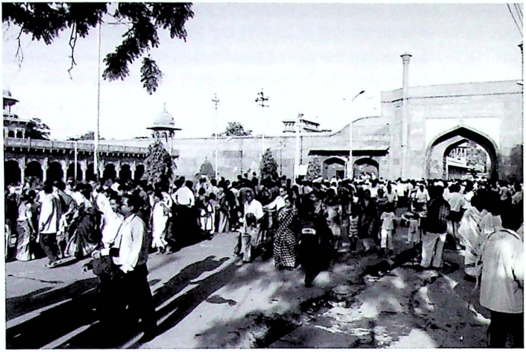

Fig. 1. Uncontrollable crowd at Taj Mahal, Source: Author.

system to promote cultural tourism without affecting the protection of cultural property and to maintain its authenticity and integrity. In the other words, the sustainable tourism's purpose is to manage tourism and tourism growth in a responsible manner, i.e., not harming the cultural property, causing environmental damage, climate change, pollution, loss of ecosystems and keeping the consumption of resources at unsustainable levels (Dayalan 2019).

Often perceived as a threat to the preservation of cultural and natural sites, the presence of tourists can also be useful in certain cases for the protection and maintenance of cultural properties. In fact, tourism is often the driving force behind the efforts aimed at preserving the cultural heritage sites, and it has likely saved many sites that may have been otherwise neglected or destroyed. The tourist movement in the huge palaces, complexes and forts is useful to maintain them in a presentable condition; otherwise they may remain uncared or become shelters for birds, bats, insects, trees and creepers and sometime even for illegal elements.

The management mechanism has to include how sustainable tourism can be achieved in the cultural heritage sites. The tourism has to be planned in such a way that it takes care of all resources such as economic and social and aesthetic value, while maintaining cultural integrity, biological diversity and life support systems. In fact, the cultural properties are not seen as an overall priority for national development, unless they have clear relationship with social values, economic activities and local development. It is evident that heritage is a driving force for the development of tourism industry. The revenue generated by cultural tourism is the most significant for the economy. Many people who live where these important heritage sites exist have gained substantial economic benefits from increased development designed to serve the influx of visiting tourists. Tourism's power, however, can turn inadvertently destructive without proper management. Thus, the sustainable tourism constitutes an essential engine for economic development, where the major measurable economic impacts of cultural properties include job opportunities and household income, development of infrastructure and business incubation. In developing the management plan in order to balance tourism flow and sustainability of the sites, it is important to have appropriate legal frameworks in managing cultural heritage sites and the relevant role of public participation. The local communities may be involved as a key stakeholder, as the benefit of social, economic and moral boost due to the cultural property goes to them.

In order to maintain the monuments in a better manner, it is important to control the number of tourists visiting them and also their access, especially in such areas that are highly vulnerable to decay or deterioration. Therefore, it is necessary to determine the carrying capacity of a monument, especially for those where visitation is in high numbers. The term 'carrying capacity' refers, in the present context, to the number of individuals a given area can support within the monument and without degrading the structural, historical and aesthetic environment for present and future generations. On the basis of the study of carrying capacity, appropriate decisions can be taken in this regard. Visitor access and movement within the monument should be worked out in such a way that it should effectively serve crowd management

without hindrance to the visitors. In the vulnerable or narrow portions of the monument, tourist movement can be regulated or restricted. A successful management of congested tourism mainly depends upon the effective coordination between a range of stakeholders, such as site managers, local authorities, tour operators, transportation companies and information managers at different levels.

The objective of sustainable cultural tourism is to maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about the cultural heritage and become compatible with the social, cultural and ecological environment.

Visitor Facilities

The visitor facilities and interpretation of the monument should be developed at all levels to meet visitor expectations as a means of improving the enjoyment and understanding of visitors and their appreciation of the significance of the monument.

Infrastructure

Adequate infrastructure like toilets, cloakroom, potable water, parking slot, audio-guide facilities, ticket booths (if it is a ticketed monument), souvenir counter and information centre have to be created within or near the monument and site for the convenience of the tourists. These facilities should be easily accessible to the visitors and there should be proper signage to guide the visitors properly.

The signage has to be designed in such a way that they are clearly legible, should not be more attractive and the materials used for its preparation should be aptly matched with the nature of the monument. They are to be provided at suitable locations in the monument without interrupting the view of the monument and the movement of visitors and also, they should not be an eyesore.

Amenities

Adequate amenities have to be provided for the visit of the differently abled persons without compromising the authenticity and integrity of the monument. Braille signage (for the benefit of visually disabled persons), wheelchairs, battery-operated small vehicles and

other facilities are to be made available to the differently abled persons and senior citizens during their visit.

Interpretation Centres

For better understanding and appraisal of the monument by the visitors, the interpretation centres have to be created wherever possible. This centre should provide all information about the monuments and other relevant details. If possible, screenplay, demonstration and other audio-visual systems can also be arranged in the interpretation centres.

Information Brochures

Similarly, guidebooks or pamphlets providing information about the history, architecture and other details of the monument may be also made available to the visitors.

Communication of Good Practices

Communication about the acceptable behaviour and good practices to the tourists is very important. The various do's and don'ts within the premises of the monument have to be exhibited wherever possible for guiding the activities of the visitors in the heritage zone.

Nexus between Tourism and Conservation Management of Taj Mahal

Taj Mahal at Agra, Uttar Pradesh, one of the most visited monuments in India (Figs. 2 and 3), exhibits a graphic picture of the nexus between tourism and the conservation management. Agra has three world heritage monuments. i.e., Taj Mahal, Agra Fort and Fatehpur Sikri. Out of these monuments, the first two are located on the right bank of the river Yamuna in the city of Agra within a distance of about 800 metre in between. Fatehpur Sikri is situated at a distance of 40 km from Agra. Taj Mahal (1631–1648), a miracle in marble, is one of the outstanding creations in the whole spectrum of Islamic architecture in India (Ebba Koch 2006). Notwithstanding, the contemporary sources refer to this most exquisite specimen of human architecture as "Illumined Tomb" (*rauza-i-munavvara*), it is popularly known as Taj Mahal, obviously derived its name from the title of the queen i.e., Mumtaz Mahal. (Begley and Desai 1989) The Taj Mahal

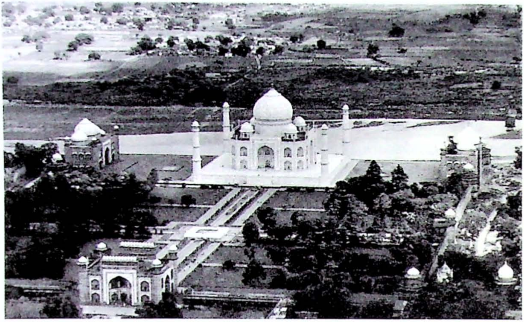

Fig. 2. An overall view of Taj Mahal, Source : Author

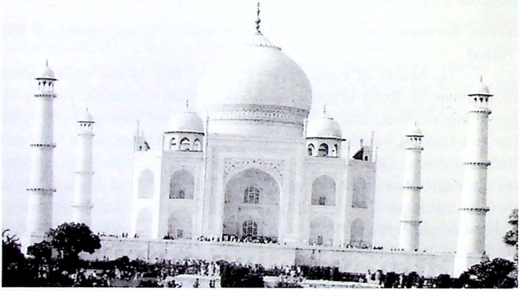

Fig. 3. A general view of Taj Mahal, Source : Author

was inscribed on the World Heritage List in 1983. Its inscription as a cultural property of universal significance was justified in the following words:

The Taj Mahal is the greatest architectural achievement of the whole range of Indo-Islamic architecture. Apart from its tremendous romantic appeal, it is a masterpiece of architectural style, in conception, treatment and execution, all alike.

Taj Mahal has a long-recorded history of its conservation. The earliest record of its repair is available in a letter (*farman*) dated 1652 CE from Prince Aurangzeb to his imperial father Shah Jahan wherein he pointed out the defect in the dome and vaults of the mausoleum. Since then, the conservation works of the minor and major nature were undertaken to the various buildings of the Taj Mahal complex from time to time depending upon necessity and requirements. Notwithstanding, Taj Mahal is in a good state of preservation. Due to its age, minor defects such as cracking of stones due to corrosion of iron dowels and clamp, weathering effect on the stones, decay of the mortar of the roof, missing of inlay due to human vandalism and the loss of the adhesive are bound to occur. The environmental effect on the building, wear and tear and some degradation due to the movement of a large number of visitors are some of the major issues. Extensive studies have been carried out by multi-disciplinary experts from India and abroad to understand the various factors responsible for the possible deterioration or defect of the monument and remedial measures have been taken from time to time to safeguard it. The properties of the materials used for construction are thoroughly analysed and the stability of the structure and foundation and the nature of the sub-soil strata are examined meticulously. The verticality of the minarets, dome and other structures are monitored periodically to know any change in their position (Dayalan 2009a, 2009b).

An integrated digital database for Taj Mahal complex on the designated geographic information system (GIS) platform has been created after site survey for proper monitoring of this World Heritage Monument and its environment (Dayalan 2009a: 211–214). Air pollution in the ambiance of Taj Mahal has been monitored constantly

and effective actions have been taken to control it. However, over-visitation and security are some of the major issues affecting Taj Mahal. Generally, Taj Mahal is visited by 25,000 to 30,000 visitors every day. Further, the number increases on Saturday and Sunday due to holiday as well as closure of Taj on Friday. Tourist inflow is very high in winter seasons, i.e. 35,000 to 40,000 visitors per day. Due to heavy tourist rush long queues can be seen at the ticket booking counters; at the security checking points and at the entry of the main mausoleum. It is difficult to manage a large crowd in the main mausoleum. According to the existing practice, the visitors are allowed to enter and come out of the same entrance gate of the main mausoleum after visiting the upper cenotaph chamber. Excess tourist movement does cause wear and tear on the surface of the monument apart from many other hazards such as stampede, pollution and vandalism.

Necessary measures have been taken or proposed to regulate the visitor movement in the Taj Mahal complex and also to enhance visitor experience. The studies have been initiated to determine the carrying capacity of the Taj Mahal complex and appropriate action will be taken on the basis of that study. Visitor access and movement within the monument have been worked out in such a way that it should effectively serve crowd management without hindrance to the visitors. The congestion at the entrance of main mausoleum has been controlled to some extent by opening an exit on the other side of the mausoleum.

For a better understanding and appraisal of the monument by the visitors, efforts have been made to establish Visitors' Facilitation Centres at the courtyards located near the eastern and western gates of the monument in consultation with the international and Indian experts after conserving the historic buildings without altering or interfering with the original fabric of these historic buildings[2] (Fig. 4). Necessary provisions have been made in these buildings to provide facilities like drinking water, locker, toilet, souvenir shop, library, interpretation centre, ticket counter, rest room for senior citizens and differently abled

2. The Visitors' Facilitation Centres were developed by the author when he was posted in the ASI, Agra circle.

Fig. 4. Proposed Interpretation Centre at Taj Mahal, Source: Author.

persons, security equipment for frisking the visitors and first-aid centre for the visitors. It is also proposed to provide all information about the monument such as history, architecture, all events associated with the monument, conservation efforts and other relevant details. If possible, screen play, demonstration and other audio-visual systems can also be arranged in the interpretation centres. The various do's and don'ts within the premises of the monument has been exhibited wherever possible for guiding the activities of the visitors in the heritage zone. Adequate amenities have been provided for the visit of the differently abled persons and senior citizens. The signages have been provided at appropriate locations in the monument without interrupting the view of the monument and the visitor's movement.

Taj Mahal and other monuments in Agra are not only the prime destination of tourism, but also the source of economic growth for the nation in general and for Agra in particular. These monuments are directly or indirectly responsible for the creation of many tourism-based jobs and establishments like hotel and restaurants, shopping complexes, handicraft industries, tourist operators, transport operators,

guides, photographers and hawkers. Hence, all efforts are being taken to promote tourism without any hindrance to the authenticity and integrity of Taj Mahal and other the cultural properties in Agra. The prime goal of sustainable tourism is to maintain a balance between tourism and cultural properties and also to maintain a high level of tourist satisfaction.

References

Begley, W. E and Desai, Z.A. 1989. *Taj Mahal: The Illumined Tomb- An Anthology of* Seventeenth *Century Mughal and European Documentary Sources*. Washington: The University of Washington Press.

Dayalan, D. 2009a. *Taj Mahal and Its Conservation.* New Delhi: Abhishek Prakashan.

Dayalan, D. 2009b. Taj Mahal: Conservation and Management, in *Digital Libraries and Databases for the History of Medieval Eurasia* (Alexander A. Stolyarov Ed.), pp.71-82. Moscow.

Dayalan, D. 2010. Remote Sensing and GIS Application in the Management and Conservation of Heritage Properties at Agra, in *Space, Time, Place: Third International Conference on Remote Sensing in Archaeology, 17–21 August 2009, Tiruchirappalli, Tamil Nadu, India,* (Stefano Campana, *et al.* Eds.), pp. 211–214. Oxford: British Archaeological Reports (BAR) International Series 2118.

Dayalan, D. 2019. *Conservation and Management of Ancient Monuments and Archaeological Sites.* New Delhi: Aryan Books International.

Koch, Ebba. 2006. *The Complete Taj Mahal and the Riverfront Gardens of Agra.* New Delhi: Bookwise (India) Pvt. Ltd.

5. Cultural Heritage and Preservation of Cultural Properties in Japan: A Historical Perspective

Manabu Koiso

Abstract

Since middle of the 19th century, the concept of preservation of cultural heritage in Japan gradually developed in parallel with westernization and economic growth. After the opening of the country to the world in 1854, Japan was desperate to catch up with the western world which led to neglect of cultural heritage by the people. The government enacted laws in order to conserve and protect cultural buildings and objects, and to prevent them being lost or sold to foreign markets. Situation remained almost the same up to the World War II, when many of the cities were burnt to ashes by bombings and everything had to re-start from scratch. The most important issue was construction of new buildings, sometimes by demolishing old ones which survived the war. Preservation was also difficult because traditional buildings of Japan are wooden structures.

Combining all the previous laws, the Law for the Protection of Cultural Properties enacted in 1950 became the significant turning point for preservation and protection of modern history of Japan. Furthermore, the major shift in minds of the people occurred in the late 20th century when the importance of cultural heritage was appreciated in world wide scale by the World Heritage of the UNESCO. Once registered as the World Heritage, it attracts people of not only of one nation but tourists from all over the world which contributes to regional development on a massive scale. In this connection, promotion of tourism has become more important than ever before. Cultural heritage - both tangible and intangible together – has been recognized as indispensable for vitalization of regional economy. More recently, various ideas have been developed to attract more tourists.

Keywords: Cultural Heritage, Westernisation, Economic Development, Preservation, Laws, Tourism.

Introduction

Interest in cultural heritage in Japan dates back to the second half of 19th century when the country opened its trade to the world and subsequently experienced sudden and rapid westernisation. Many components of cultural heritage were destroyed in the name of development or modernisation. The following one hundred years were period of a repeated destruction of heritage, on one hand, and attempts at preventing them by enacting laws, on the other.

Towards the end of 20th century and at the beginning of the 21st century, the world saw a surge of new trends and concepts such as the world heritage sites identified by UNESCO, sustainability (sustainable development goals (SDGs)), utilisation of heritage, tourism promotion and focus on regional development. Japan was also impacted by these developments along with certain original approaches in the area of cultural heritage management.

The present paper briefly reviews the developments since the 1850s with a quick glance at the laws dealing with cultural heritage in Japan.

1. Opening of the country to the outside world: mid-19th century

Cultural heritage in Japan gradually developed under the new government that ushered in the Meiji Era (1868–1912), when the Edo (former name of Tokyo) or Tokugawa Shogun Era (1603–1867) came to an end. This was the time of great epoch in the early modern history of Japan, which was triggered by the visit of four military ships from the US; of which, two were steamers, the most advanced ships of the time, anchored just outside the Bay of Edo in 1853 (Table 1). Commodore Mathew C. Perry of the United States Navy was in command of the fleet bringing a sovereign letter of the President of the US to the Tokunaga Government. The purpose was to force the Tokunaga government to end national isolation – which took place between 1639 and 1854, the time when the international trade was banned by the Tokunaga government except with Joseon Kingdom, Ryukyu Kingdom, Ming and Qing Dynasties of China and Holland/Dutch East India Company – and open the ports of the country to American and world trade.

Table 1. Chronology of Laws on Cultural Heritage in Japan

Year	Major incidents in Japan and abroad	Period of endangering cultural-heritage	Enactment of laws and events related with protection of cultural heritage in Japan
19th century and earlier			
1603-1867	**Edo Period (Tokugawa Shogun Period)**		
1639-1854	The National Isolation: Trade closed with froreigncountires except China, Korea, Ryukyu Kingodom and Holland		
1853	Commodore Mathew C. Perry of the United States Navy anchored outside of the Bay of Edo.		

1868-1912	**The MEIJI ERA**		
1868 onwards	The Meiji Restoration and reforms of 'Civilization and Enlightenment' (westernization and modernization)	Rapid Westernization and weakening of Buddhist temples due to anti-Buddhist movement.	**The Ordinance distinguishing Shinto and Buddhism**: led to anti-Buddhism movement.
1871-97			Shintoism dclared to be Japan's official religion.
			The Proclamation for the Preservation of Antiquities and Old Items
1871 & 1875			**Confiscation Law**: land owned by Buddhist temples and Shinto shrines was seized by the government.
1872			The 1st National Exhibition at the Sacred Hall at Yushima: led to the establishment of the Tokyo National Museum.
1894-95	The Sino-Japanese War: Victory over China promoted nationalism and awareness the importance of cultural heritage.		

1895			Establishment of the Nara National Museum
1897			Establishment of the Kyoto National Museum
1897-1929			**The Ancient Shrines and Temples Preservation Law**: (1)Designation of National Treasures and Specially Protected Buildings, (2)Funds provided for reparing shrines and temples.
20th century			
1904-05	Japan won the Russo-Japanese War		

1912-1926	**The TAISHO ERA**		
1914-18	The World War I: Japan was listed among the victor nation and special procurement demand led to a boom in economy.	Industrialization and land development due to modernization.	
1919-50			**The Law for the Preservation of Historic Sites, Places of Scenic Beauty and Natural Monuments** (史跡名勝天然記念物保存法): designation of Historic Sites, Places of Scenic Beauty, and Monuments.

1926-1989	**The SHOWA ERA**		
1929-1950		The Great Depression started in the USA also affected Japan and economic recession lead to loss of cultural heritage of former feudal lords; and devaluation of Japanese Yen led to export of cultural heritage not designated as National Treasures.	**The National Treasures Preservation Law** (国宝保存法): intended protection and designation of the National Treasures are expanded beyond shrines and temples to any heritage of both public and private ownereship.
1933-50			**The Law Regarding the Preservation of Important Objects of Arts** (重要美術品等の保存に関する法律): aimed to stop export of cultural heritage.

1939-45	**The World War II**		
Late 1940's - 1950's		Social and economic confusion following the WWII led to loss of cultural heritage.	
1949	During the restoration of Horyu-ji Temple (7th century AD), an outbreak of fire destroyed murals of Bodhisattvas etc.which are said to have their historical origin in paintings of Ajanta Cave No.1.		
1950			**Law for the Protection of Cultural Properties** : integration of the previous three laws; more emphasis on protecting heritage and its democratization; designation of Tangible and Intangible Cultural Properties.
1960'-70's		Rapid economic growth, development and social change led to destruction and downfall of cultural heritage.	

1964	Tokyo Olympics		
1968			The Agency of Cultural Affairs (afiliated with the Ministry of Education, Science, Sports and Culture, the reorganized as Ministry of Education, Culture, Sports, Science and Technology in 2001) was established.
1970	Japan World Exposition, Osaka		
1975	Effectuation of the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) of UNESCO.		
1989-2019	**The HEISEI ERA**		
1992	Japan ratified the World Heritage Convention		
1995		The Great Hanshin-Awaji Earthquake	

21st century			
2001			**The Fundamental Law for the Promotion of Culture and Arts** (revised as **the Basic Act on the Promotion of Culture and the Arts** in 2017)
2003			Visit Japan Campaign inaugurated.
2004			**The Landscape Act**
2006			**The Tourism Nation Promotion Basic Law**
2008			Japan Tourism Agency (afiliated with Ministry of Land, Infrastructure and Transport) was established.
			The Law on the Maintenance and Improvement of Historic Landscape in a Community
2013		The Great East Japan Earthquake	
2015	The United Nations has set SDGs.		Designation of the Japan Heritage.
2016		Kumamoto Earthquake	
2020	Tokyo Olympics and Paralympics		
2025	Japan World Exposition, Osaka		

As a result of this development, and also due to the internal political and military pressures, Tokunaga Shogun had to resign, and the new Meiji government was formed along with the restoration of the imperial rule (Fig. 1). The early years of the Meiji era is also known as the *Meiji Restoration* or the time of 'westernisation movement', seeking for a new 'civilization and enlightenment' for the country (Lew 1995). The common tendency was to regard the Western or European culture to be superior to that of Japanese, and the whole way of life

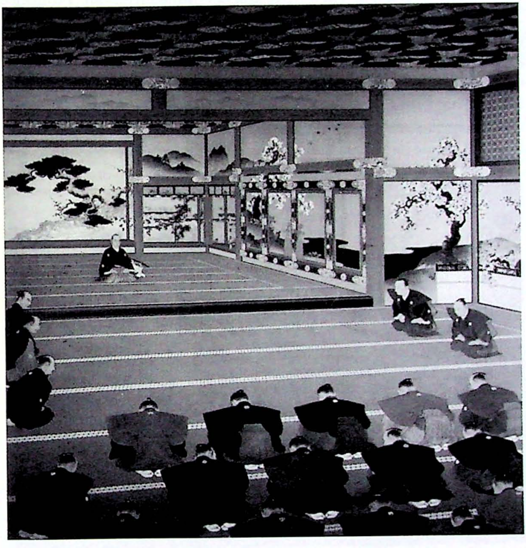

Fig. 1. Returning the power to the Emperor and restoring the Imperial rule (1866 – 1867) by Tanryo Murata. (Source : Wikipedia,n.d.a)

(besides religion!) was rapidly and forcibly westernised. The industrial revolution of Japan resulted from the introduction of new technologies such as locomotives and ships with steam engines. Telegrams, gas lamps, Western architecture and clothes as well as meat-eating habit (especially beef) were also introduced (Fig. 2). The most important reason why the government itself encouraged such a change was to avoid colonisation of Japan by the Western countries, which was rapidly happening in the world at that time.

In 1868, the new government announced an ordinance distinguishing Shinto and Buddhism in order to strengthen the country. Even though certain conflicts existed between the two religions since the introduction of Buddhism in 6th century CE in Japan from the continent, both remained almost syncretised in the following millennium. However, in 1871, the Meiji government decided to hold Shinto as the core of national unity and spiritual stem of the people, since it originated in Japan whereas Buddhism had a foreign origin. Also, in the same year (and later also in 1875), the government seized the land owned by both Buddhist temples and Shinto shrines under the Confiscation Law to strengthen its control over the country. Thus, Buddhist temples were weakened by lowering their authority, eroding the financial base as well as forcing out followers. The policy of the

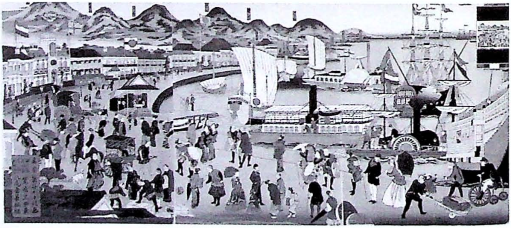

Fig. 2. Prosperous Port Kobe, Settsu Province, by Konobu Hasegawa (1871). (Source : Kobe City Museum)

government in favour of Shintoism induced the public into an anti-Buddhism movement, which was taken to an absurd extreme; many of Buddhist temples were destroyed, followed by stealing of the holy objects, which were sometimes sold to the foreign markets (Fig. 3; Ketelaar 1993). At the same time, rapid industrialisation also accelerated the loss of traditional buildings or monuments and cultural landscapes throughout the country.

2. Early Attempts to Preserve Cultural Heritage: Late 19th Century

To overcome this situation, in 1871, the Preservation of Antiquities and Old Items Act was proclaimed (repealed in 1897), making it the first law to be declared to preserve cultural heritage in Japan (Kakiuchi 2014: 2). This action of preserving the heritage was regarded as a modern, Western concept. Antiquities were classified into 31 categories, which laid the foundation of the categories that are in use today. The government notified across the nation to preserve antiquities

Fig. 3. Destruction of Buddhist images, Kurokawa area, Kawasaki (Source : Wikipedia,n.d.b)

and to report objects and their owners to the respective local government for registration, before they would be scattered and/or lost.

In the following year, 1872, the government organised the first exhibition of national treasures at the Sacred Hall of Yushima, Tokyo, displaying various antiquities, paintings and calligraphic works, stuffed animals and specimens of plants, which were collected for the Vienna International Exposition of 1873. It gained a huge reputation, attracting 1.5 lakh visitors. This event, together with imminent situation indicated by the Act of 1871, encouraged the establishment of the first national museum in Japan at Tokyo so that precious objects would be collected and kept at one place (Tokyo National Museum 2019). This was followed by the establishment of two more national museums in western Japan at Kyoto and Nara, in 1895 and 1897, respectively.

The victory of Japan over China after the Sino-Japanese War in 1894–1895 promoted the idea of nationalism and an awareness on the importance of cultural heritage. This led to the enactment of the Ancient Shrines and Temples Preservation Law of 1897 (repealed in 1929), taking over the Act of 1871 (Coaldrake 1996). Under this law, the owners of shrines and temples could apply to the government for funds to repair them; 'National Treasures' and 'Specially Protected Buildings' were designated, and it became obligatory for the owners to protect and exhibit heritage in museums when required and penalties were imposed if they were violated. However, the law did not cover the properties owned by the national and local government or by individuals.

3. Expanding the scope of cultural properties: first half of 20th century

The early decades of the 20th century were a time of further industrialisation and land development for Japan. This was due to modernisation following the victory of Japan over Russia in the Russo-Japanese War of 1904–1905, on the one hand, and special procurement demand caused by the World War I on the other. The country being listed among one of the victorious nations also led to an economic boom. This period witnessed a series of new laws that encompassed not only religious properties but the wider aspect of cultural properties including vernacular buildings and objects, landmarks and scenic spots.

The aim of the Law for the Preservation of Historic Sites, Places of Scenic Beauty and Natural Monuments enacted in 1919 (repealed in 1950) was to protect sites and monuments not owned by shrines or temples that were at risk of either deterioration or destruction (Ministry of Education, Culture, Sports, Science and Technology n.d.). The central government designated these sites in order for the local government to supervise them by offering financial support. Permission of the central government was necessary to alter the present condition of these sites and monuments.

This was followed by the National Treasures Preservation Law of 1929 (repealed in 1950). Whereas only shrines and temples could be designated as national treasures under the Ancient Shrines and Temples Preservation Law of 1897, the new law extended related objects to castles of historic significance and other precious artefacts also owned by public organisations or individuals such as former feudal lords to preserve them. At the same time, 'Specially Protected Buildings' of 1897 were integrated into the National Treasures. The National Treasures were also prohibited from export for the first time in the history of heritage legislations. Financial support from the government for repairs was continued and the owners had an obligation to exhibit their possessions at national museums whenever required.

Unfortunately, however, the Wall Street crash in the United States, which triggered the Great Depression across the world towards the end of 1929 lasting for a decade, affected economic conditions and also the approach of the government to heritage management. This also affected Japan and economic recession led to further loss of cultural heritage; the devaluation of Japanese Yen led to the export of cultural heritage not designated as National Treasures. The purpose of the Law Regarding the Preservation of Important Objects of Arts enacted in 1933 (repealed in 1950) was to prevent such export of treasures. Pictures, sculptures, architecture, documents and writings, swords, handicrafts and archaeological artefacts were considered as objects worthy of preservation. Those made by living craftsmen or objects, which are less than 50 years, since their production, and objects imported less than a year ago were exempted (Enders and Gutschow 1998).

4. Renewed Emphasis on the Protection of Cultural Properties: post-World War II

In the following years after the World War II, social chaos gradually ceased and efforts for the protection of cultural heritage resumed. It was in 1949 when a tragedy occurred at Horyu-ji Temple, which was built in 7th century CE, the oldest existing wooden structure in the world (registered as a World Heritage site by the UNESCO in 1993). Four walls of the Golden Hall (Fig. 4) within the temple complex were painted with Buddha, *Bodhisattvas* and apsaras, which are known to indicate the influence of paintings of Ajanta Cave No.1, having almost identical motifs, postures and designs (Figs. 5 and 6). As a part

Fig. 4. Golden Hall, Hōryū-ji (Source : Wikipedia,n.d.c)

Fig. 5. Mural of Amitaba's Paradise (upper half), Golden Hall of Hōryū-ji. Colour on fresco, late 7th century, 266 cm wide. Photo before the fire which severely damaged most wall paintings in 1949 (Source : Wikipedia, n.d.d).

of 'The Great Restoration' of the temple, which commenced in 1934, renowned artists and scholars carried out replication procedures of these murals. In the early morning of 26 January 1949, fire broke out in the Golden Hall, which destroyed the precious paintings. It is presumed that electric heating pad, which was used by the painters, was the source of fire. The incident induced enactment of a new comprehensive law to more carefully protect and preserve cultural properties.

Thus, the Law for the Protection of Cultural Properties (LPCP) was enacted in 1950 under the supervision of the Ministry of Education (reorganised as Ministry of Education, Culture, Sports, Science and Technology in 2001) by integrating previous laws of 1900s with more emphasis on protection. LPCP became the new starting point of protecting cultural heritage, which is in force till today. It deals cultural

Fig. 6. Bodhisattva Padmapani / Avalokitesvara
(Source : Wikipedia Commons,n.d.)

properties within 'a comprehensive system, ensuring a great advance in the administration of the protection of cultural properties.' It also provided for the establishment of the Committee for the Protection of Cultural Properties, as an external agency of the Ministry of Education, responsible for the execution of the provisions of this law (Ministry of Education, Culture, Sports, Science and Technology 2009). The committee became the precursor of the Agency for Cultural Affairs of 1968.

LPCP defines cultural properties as cultural productions of historic, artistic and/or academic value, which are created, developed and preserved throughout the history of Japan. They have been passed down for generations, becoming precious assets of the Japanese people. The aims of the LPCP are to protect, preserve and utilise cultural property, and to promote cultural improvement of citizens.

After a number of amendments in the following decades, the current LPCP classifies cultural properties into following seven categories (Table 2) (Agency for Cultural Affairs 2015: 2–3, 2019a).

1. *Tangible Cultural Properties*: These properties consist of (i) high historical or artistic value such as structures, paintings, sculptures, crafts, calligraphic works, classical books and ancient documents and (ii) high scientific value such as archaeological artefacts and other historical materials.

2. *Intangible Cultural Properties*: Those having high historical or artistic value such as drama, music and craft-making techniques.

3. *Folk Cultural Properties*: Items indispensable for understanding the transition in people's daily lives, such as (i) manners and customs relating to (a) food, clothing and housing, (b) occupation, (c) religious faith and (d) annual events, (ii) folk performing arts, (iii) folk skills and (iv) clothes, implements and houses used in connection with the foregoing cultural properties.

4. *Monuments*: These are historic sites, places of scenic beauty and natural monuments, e.g. sites having historical or scientific value: shell mounds, tumuli, fortified towns, castles and monumental houses. Places

Table 2. Number of Designated Cultural Properties

				Number of designations	
	Categories National Treasures Important Cultural Properties				
1	**Tangible Cultural Properties**	Fine arts and crafts	Paintings	161	2,026
			Sculptures	136	2,711
			Applied Crafts	253	2,464
			Calligraphies, Books	228	1,913
			Ancient Documents	62	768
			Archaeological Artifacts	47	640
			Historic Resources	3	213
			Total	890	10,735
		Structures		(289 buildings) 226	(5,033 buildings) 2,947
		Total		1,116	13,232
		Note: The number of Important Cultural Properties includes the number of National Treasures.			

	Categories Individual recognition Group recognition		Number of designations	
2	**Intangible Cultural Properties**	Performing arts	36	14
		Craft Techniques	39	16
		Total	75	30
		Note: Some holders are recognized in multiple categories.		
	Categories		Number of designations	
3	**Folk Cultural Properties**	Tangible Folk Cultural Property	220	
		Intangible Folk Cultural Property	309	
		Total	**529**	

	Categories		Number of designations		
4	**Monuments (Historic sites, Places of scenic beauty and Natural monuments)**	Historic Sites	1,823		
		Places of Scenic Beauty	415		
		Natural Monuments	1,030		
		Total	**3,268 (3,154)**		
	Some Historic Sites, Places of Scenic Beauty, and Natural Monuments are designated in multiple categories and the number of unique designations is indicated in parenthesis.				
	Categories		Number of designations		
5	**Cultural Landscapes**		**64**		
6	**Preservation Districts for Groups of Traditional Buildings**		**118**		
7	**Buried Properties**		**4,65,000**		
	Data based on Agency for Cultural Affairs, Government of Japan 2019 Numbers copied from Japanesé page which gives more recent numbers.				

of scenic beauty having high artistic or scenic value: gardens, bridges, gorges, seashores and mountains. Animals, plants and geological and mineral formations having high scientific value are also included.

5. *Cultural Landscapes*: Landscapes that have evolved with the modes of life or livelihoods of people with the geo-cultural features of the region, which are indispensable to the understanding of the lifeways and/or livelihoods of the people of Japan.

6. *Groups of Traditional Buildings*: These are defined as the buildings having high value and form historic scenery together with their surroundings.

7. *Buried Properties*: These remain the prime objective of archaeology.

The most important new aspects of LPCP are the concepts of tangible and intangible properties along with folk cultural properties and buried properties and not only the central government, but also local governments could now designate any property under the cultural heritage classification listed above. This reflects the democratisation of designating cultural properties, even though the central government tends to play a major role in heritage conservation due to limitation of financial resources for local governments (Kakiuchi 2014: 4).

In the case of buried properties specifically, which falls within the scope of archaeology, the current number of registered sites add up to around 4.6 lakhs. The surface area of Japan is approximately 3.8 lakh km^2, which is a little smaller than the states of Rajasthan (3.4 lakh km^2) and Haryana (44,000 km^2) in India added together. This means that for an average, there are 1.2 sites for every 1 km^2. However, 70% of the land is mountainous and habitation at any period has been confined to only the rest of 30%. Therefore, archaeological sites of any period are confined in this limited land, and in terms of numbers, every 0.24 km^2 has a heritage site, which means that whenever a new construction of buildings is planned, there is a high possibility of its location being a part of an archaeological site. This is the reason behind as many as 7500 to 8000 excavations per year (recorded maximum of 11,738 excavations in 1996), though most of them are small-scale rescue excavations (Nara National Research Institute for Cultural Properties, 2014). It can be said

that LPCP carries the heaviest responsibility towards heritage when compared to all the previous laws.

At the same time, as mentioned earlier, utilisation of cultural properties has also become one of the basic issues of LPCP. Since cultural properties are assets of the general public, they must be displayed in museums, theatres and other public facilities or in various kinds of events so that people can get access, know and learn about them. For example, in case of Ōnaka site (between mid-Yayoi to mid-Kofun period, c. 1st century BC to 5th century CE) in Harima town, Hyogo prefecture, in addition to exhibits of the excavated materials in an adjacent museum, the museum offers local residents and visitors a range of opportunities to experience ancient lives: to restore pit houses, to make ancient beads, to start fire by hands, rice-planting and to spend a night in restored houses. The museum also collaborated with kindergartens, junior and senior high schools and universities for such activities (Agency for Cultural Affairs 2015: 6).

5. Cultural Heritage and Tourism: towards the end of 20th and beginning of 21st century

(i) High economic growth

Enforcing law regarding cultural heritage went in line with the transformation of the society as well as changes in the mode of tourism. In contemporary society in Japan as well as in the world, tourism has become the most important element for preservation and utilisation of cultural heritage.

During World War II, many cities of Japan were bombed and reduced to ashes. However, they were restored at a faster pace. Japan's economy was recovering in the subsequent years, and by 1955, the gross national product (GNP) of Japan had exceeded that of the pre-war period. This marked the beginning of the period of high economic growth, which lasted for about two decades. Tokyo was chosen to host the 1964 Olympics because of which the social and local infrastructure had undergone a drastic change, leading to changes also in lifeways of the Japanese nation.

Super express trains (*Shinkansen*) were introduced and highways across the country were constructed. Income of general public increased rapidly, more and more people started to own cars and tourism soon became one of the major leisure activities. The World Exposition of 1970 held at Osaka also triggered a boom for both domestic and overseas travel. It attracted 64 million visitors (i.e. two-thirds of the entire population of the country; foreign visitors were only 1.7 million or 0.3%), which was the record as the largest number of visitors in history of the World Exposition until it was held at Shanghai in 2010, which attracted about 74 million visitors.

The 1960s and 1970s saw 'mass tourism' (travel by groups on pre-scheduled tours, usually under the organisation of tourism professionals: Sezgin and Yolal 2012:73) achieving a big boom across the world. The boom also spread to Japan and large hotels were constructed one after the other in many of tourist destinations throughout the country, as hot spring resorts. Travelling abroad was also steadily becoming within reach of the general public following liberalisation of overseas travel for the Japanese citizens in 1964. Also around this time, big jet airplanes such as Boeing 747 ('Jumbo') were introduced into service in 1970.

From about the 1980s, people of Japan were becoming more conscious about 'culture' and 'region' and more people were concerned about non-material satisfaction. This was the time when meaning of cultural properties was slowly recognised as an important component of social cohesion and local identity, indispensable for regional development and promotion of tourism (Kakiuchi 2014:6).

Ratification of the World Heritage Convention of UNESCO in 1992 by the Japanese government also served as a tailwind. The sites recognised as the world heritage sites in the country (counted to 22 in 2018) have raised the awareness of people towards cultural properties as well as the environmental context surrounding them.

A series of laws were also enacted after the turn of the century, which was the outcome of a broad social consensus on the importance of culture and landscape in the Japan:

1. *The Fundamental Law for the Promotion of Culture and Arts* (enacted in 2001 under supervision of the Agency of Cultural Affairs; revised in 2017 as the Basic Act on the Promotion of Culture and the Arts): Its aim is 'to promote the independent activities of people carrying out activities related to culture and the arts. The act is designed to comprehensively and systematically promote policies related to culture and the arts, through contributing to realizing a vigorous society and lifestyle rich in spirit', and 'plans to specify the intrinsic value and the social and economic values of culture and the arts' (Agency for Cultural Affairs 2019b).

2. *The Landscape Act* (enacted in 2004 under supervision of the Ministry of Land, Infrastructure and Transport): The aim of this Act is 'to create an attractive and comfortable living environment in order to improve the quality of life of the people of Japan'. It refers to the landscapes for the first time in the laws of Japan, stating favourable landscapes as 'shared assets of the nation', which 'are formed through harmonization of nature, history, culture and other aspects of people's livelihood, economic activities and the like in the locality' (Ministry of Land, Infrastructure and Transport 2006).

3. *The Law on the Maintenance and Improvement of Historic Landscape in Communities*, also known as the *Law on Historical Urban Development* (enacted in 2008 under supervision of the Ministry of Land, Infrastructure and Transport): 'Established to maintain and improve the "historical landscape" (defined as "buildings of high historical value, their surrounding urban environments, and good urban environments that integrate people's activities based on the unique histories and traditions of local communities"' (Agency for Cultural Affairs 2019c).

(ii) Recent issues and new trends

In close relation with these laws and cultural heritage, tourism has become a significant and key factor of socio-economic growth of Japan for the 21st century. It was already known that the population of Japan would soon be declining and the country would become a super-aging society.[1] Long-term national debt was also accumulating.

1. The population reached its peak number of 126 million in 2005 and then

Given this background, important and effective use of assets, including tourism resources (particularly cultural heritage), was regarded as a key factor for ensuring a sustainable future, since tourism was a growing and promising industry. To give a push to this policy, and to tackle the formidable situation likely in the future, the government initiated a series of campaigns and laws.

1. *The Visit Japan Campaign*: It was launched in 2003 by the former Prime Minister Junichiro Koizumi and was an initiative to build 'a tourism nation through the creation, rediscovery and improvement of tourism resources such as the natural environment, history and culture, and publicise these domestically and internationally' (Japan Tourism Agency 2010). The campaign also planned to increase the number of inbound tourists from 5 million in 2003 to 10 million by 2010 (which was accomplished in 2013). The number of inbound visitors reached 31 million in 2018 and is expected to reach 40 million in 2020, the year of Tokyo Olympics and Paralympics.

2. *The Tourism Nation Promotion Basic Law* (enacted in 2006 under the supervision of the Ministry of Ministry of Land, Infrastructure and Transport): Its aim was to provide support from the central government 'to region-driven efforts to develop tourism destinations' (i.e. historic sites, monuments, places of scenic beauty, landscapes, hot springs as well as traditional industries) and 'building a tourism nation with its capacity to revitalize regional economies, create job opportunities and increase bilateral international understanding' (Japan Tourism Agency 2019a). Culture and cultural heritage were recognised as the important components of tourism.

Based on this law, the cabinet approved the Tourism National Promotion Basic Plan in 2012. The plan envisaged broadening the base to improving the quality of tourism so that the number of both inbound and outbound tourists and their consumption can be increased (Japan Tourism Agency 2019b). The plan clearly states that by utilising

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kept on decreasing at a rapid rate of around 0.2% (Ministry of Health, Labour and Welfare, 2018: 44). In 2017, the number of persons older than 65 years was 27.7% of the entire population of Japan, when people younger than 15 were only 12.3% (Cabinet Office 2018).

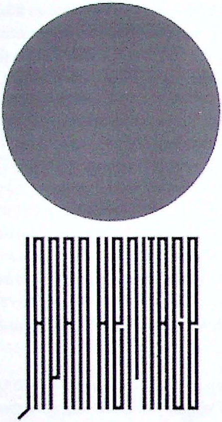

Fig. 7 Logo of the Japan Heritage. (Source : Agency for Cultural Affairs,n.d.b)

various aspects of tourism resources (nature, landscapes, history, traditions, cultures and industries), it would be 'possible to provide tourism menus that are attractive not only to foreign visitors to Japan, but also Japanese people' (Ministry of Land, Infrastructure and Transport 2012: 41). Creation of internationally competitive, appealing, attractive and sustainable tourist areas is crucial and tourist resources must be fully utilised to show good properties of the area.

3. *The Japan Heritage*: First proposed by the Agency for Cultural Affairs in 2015, its aim is to promote unique cultural traditions of Japan, encourage use of cultural properties and to revitalise regional economies (Agency for Cultural Affairs n.d.a) (Fig. 7). The primary objective is to recognise 'stories or narratives', which bind regional cultural properties of Japan focusing on 'site utilisation', so that local branding can be promoted and regional identity is recognised (Agency for Cultural Affairs, n.d.c) (Fig. 8). This is in contrast with previous administration, which designated and preserved each property as a separate 'site', failing to transfer the real charm of respective regions.

One example is 'the Story 26' titled '*Kaengata Doki* (flame-shaped pots), Jomon Pottery and the Snow Country Culture of the Shinano River Basin, Niigata Prefecture'. The 'flame pots' (Fig. 9) are a hallmark of pottery of the mid-Jomon period (c.3500–2500 BCE)

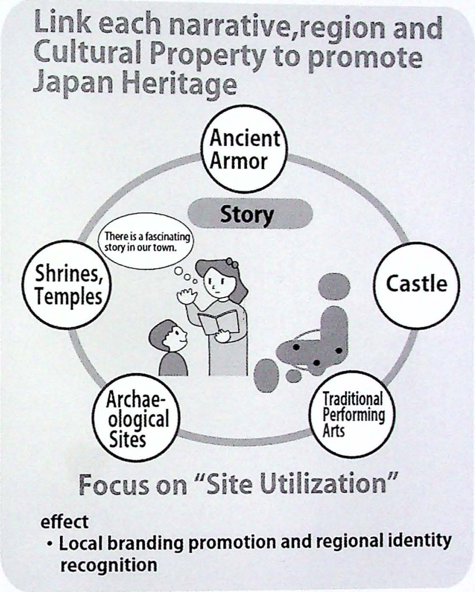

Fig. 8. Japan Heritage (Source : Agency for Cultural Affairs,n.d.c)

of the Shinano region, where visitors can experience distinct scenery seemingly unchanged for the past 5000 years. 'Many traditions that originate in the Jomon period are still practiced in the area, including methods to process and preserve food items from the mountains, river, and sea; the production of *angin* textiles, the development of manufacturing industries in the tradition of *kaengata doki*' (Agency for Cultural Affairs n.d.c).

Fig. 9. 'Flame pot' (National treasure) of Sasayama site.
(Source : Agency for Cultural Affairs, n.d.c, p.31)

Yuru-chara/kyara[2] *('cute character') or local mascots for the sake of regional development and promotion of tourism – a Japanese way*: One of the distinct means used in Japan for regional development and promotion of tourism is *yuru-chara* or local mascots that usually appear as costumed characters or stuffed suits. They became more popular after the 2000s and were created by the local government or other organisations for promotion, advertisement or popularisation of particular place/region, local products, events and organisations. Their designs involve the deformation or incorporation of motifs of local culture, products (including handicrafts, edibles, vegetables and animals), historical buildings or heroes of historical and imaginary figures. As many as 3479 mascots are listed on one of the websites that collects all the mascots in use across Japan (TINAMI 2019) and various Grand Prix contests of the mascots are being held every year.

The mascots are regarded as very important for attracting people to stimulate tourism and economic development, or for advertisement of companies symbolising their corporate identities (Wikipedia nd). They show up in various events in both local and nationwide scale and regarded as ambassadors. Various souvenirs related with the mascots are made and sold (e.g. stuffed toys, keychains, sweets and T-shirts), which have become lucrative business.

The use of such mascots is applied also in relation to archaeology for the popularisation of sites, emphasised even for the promotion or registration as world heritage sites. The following are a few examples.

Sanmaru (Figs. 10 and 11): The name *Sanmaru* is an abbreviation of the name of the site of Sannai-Maruyama in Aomori Prefecture in northern Japan belonging to early to mid-Jomon period (c. 3500–2000 BCE) (Sannai-Maruyama site 2014). The design motif of *Sanmaru* is inspired by the terracotta tabular figurines (Fig. 12) and they total around 1300 figurines, which is highest number excavated from a single site among all the Jomon sites in Japan. Altogether 780

2. The name *yuru-chara* is a contraction of '*yurui* mascot character'. *Yurui* is an adjective generally meaning 'loose', with a number of connotations such as 'gentle', 'weak', 'laid-back', 'light-hearted' or 'unimportant' (Wikipedia, n.d.).

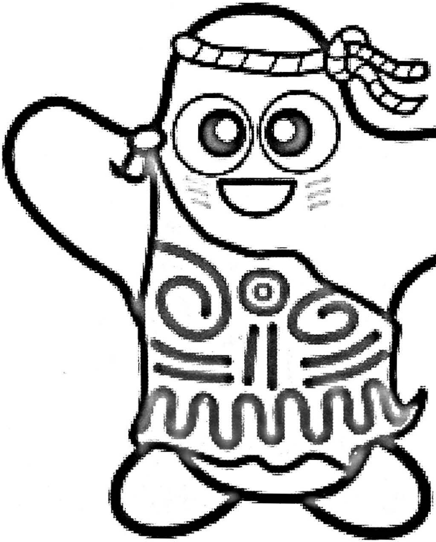

Fig. 10. Sanmaru (Source : Sannai Maruyama Ruins Preservation and Utilization Promotion Office,n.d.)

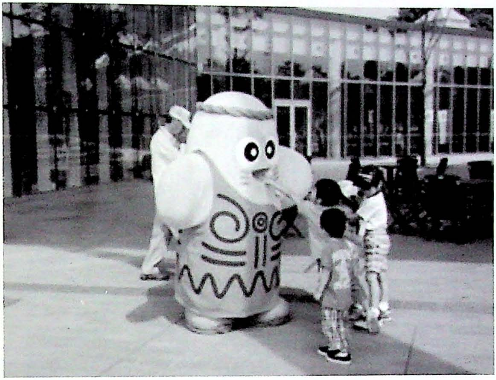

Fig. 11. Sanmaru at Jomon Great Festival
(Source : Sannai Maruyama 2012a)

pit-dwellings were found spread in an area of 40 ha, having 10 huge dwellings in the centre, complete with 'roads', pit burials, storage pits and waste pits. The site has been registered as one of the special historical sites of Japan, and along with other sites in northern regions of the country, currently promoted as the world cultural heritage of UNESCO. *Sanmaru* is important and effective to publicise the site as well as field of archaeology to all generations.

Habikoffun and *Koffun* (Fig. 13): The character of *Habikoffun* is created as a teacher of *Koffun*; the name *koffun* derives from *kofun*, a Japanese word for 'tumulus' or 'burial mound' constructed between early 3rd and early 7th century CE, and outline of their round head and widening skirt-like shape is based on the typical shape of tumulus. *Habi* is an abbreviation of Habikino-shi, the name of municipality south of Osaka. Together with adjacent Sakai-shi and Fujiidera-shi, the whole region is known for having the highest concentration of huge tumuli in Japan. Among them, tomb of Emperor Nintoku (Fig. 14, Daisen *Kofun*,

Fig.12. Terracotta figurine of mid-Jomon Period (c.3000BCE), site of Sannai Maruyama (Source : Sannai Maruyama, 2012a)

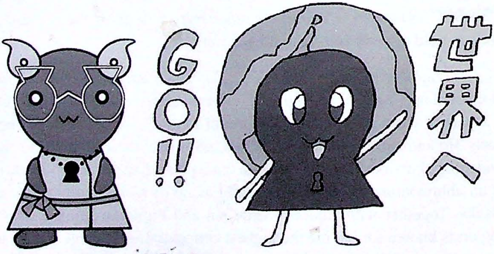

Fig. 13. Habikoffun and Koffun (Source : SORA Office 2018)

Fig. 14. Daisen Kofun, the largest of all kofun, one of many tumuli in the Mozu Group of kofun, Sakai, Osaka Prefecture (5th century) (The Ministry of Land, Infrastructure, Transport and Tourism of Japan, Source : Wikipedia,n.d.e)

5th century CE, Sakai City, n.d.) [3] is listed among the three largest burials in the world (the other two being the Great Pyramid of Giza of mid-2nd millennium BC and the Mausoleum of the First Qin Emperor of 3rd century BCE). The whole cluster of tumuli in the region or Mozu-Furuichi *Kofungun* (cluster of *kofun*) is currently being promoted for being included as a world heritage site (Osaka Prefectural Government, 2019; Sakai Tourism and Convention Bureau, n.d.). Though the idea and design of using *Habikoffun* and *Koffun* has not been approved (at least for the moment), it was an attempt to popularise this promotion.

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3. The entire area is covered by the tumulus including the moat and outer periphery: length=840 metre, width=654 metre, the surface covered=549,360 m^2 or c.55 ha (Sakai City, n.d.).

Fig. 15. Siromaru-hime
(Source : © Himeji Convention & Visitors Bureau)

Shiromaru-hime (Figs. 15 and 16): This is a mascot for Himeji castle (one of the first world heritage sites registered in Japan in 1993) and its design was even used on the number plates in motor bikes (Fig. 17). In Japanese, *shiro* is homonym for castle and white, *maru* is citadel and round in shape and *hime* is a princess, which is also included as a part of the name of the Himeji castle. The castle's construction as it stands now was completed in 17th century; the overall design is known for its elegance and compared to egret (white heron).

Sustainability

The word 'sustainability/sustainable' has become one of the keywords for maintaining lifestyle of all societies in relation to environment not only for Japan but throughout the world. The use of

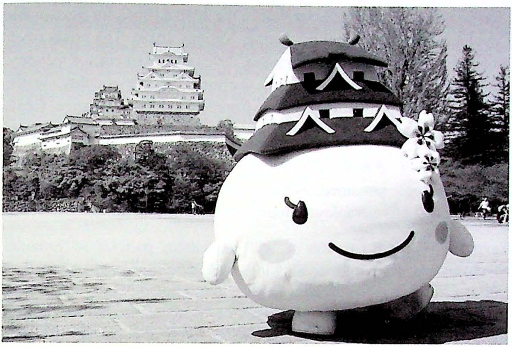

Fig. 16. Shiromaru-hime and Himeji Castle
(Source : ©castle-himeji.com)

this word has appeared for the first time in *Our Common Future* (World Commission on Environment and Development 1987) also known as the Brundtland Report, which discussed the importance of sustainable development for humankind. Following this path, in 2015, the United Nations proposed Sustainable Development Goals (SDGs), a set of 17 goals with 169 targets to be achieved by 2030, based on concrete plans

Fig.17. Original number plate for motorbikes (Source : ©Himeji City)

of action of 'Transforming our World: the 2030 Agenda for Sustainable Development' (2030 Agenda; United Nations 2019). The goals cover broad aspects of social and economic development issues, i.e. poverty, hunger, health, education, global warming, gender equality, water, sanitation, energy, urbanisation, environment and social justice. Goals 8, 11 and 12 specifically deal with sustainable tourism and cultural heritage:

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Target 8.9: By 2030, devise and implement policies to promote *sustainable tourism* that creates jobs and *promotes local culture and products*.

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Target 11.4: Strengthen efforts to protect and safeguard the world's *cultural and natural heritage*.

Goal 12: Ensure sustainable consumption and production patterns

Target 12b: Develop and implement tools to monitor sustainable development impacts for *sustainable tourism* that creates jobs and *promotes local culture and products* (United Nations 2019, emphasis added).

Thus, Japanese tourism in its current state is assuming a heavy responsibility for the promotion and protection of local culture and its heritage. The SDGs of the United Nations have now become the fulcrum of any laws or activities concerned with cultural heritage.

6. Issues and Prospects

Preservation and protection of cultural heritage has become one of the major issues to be considered for securing the future of all the societies in the world. Many historic buildings and landscapes have been destroyed and have been lost in the past several decades in the name of development, but cultural and natural heritages form the foundation on which identity of people living in the region is nurtured.

Yet even more crucial issue in Japan is the rapid ageing of the society. In contrast, the younger generation is increasingly declining in number, and thus it is difficult to inherit skills (e.g. handicrafts industry), rituals, festivals or any other tradition related with cultural properties. Due to recent slowing of the economy, funds from both central and local governments are also decreasing. There is no easy solution to overcome this obstacle. But if no action is taken now, there will be no hopeful future for Japan.

To overcome the inadequate number of the working population, the government is planning to increase long-stay workers from foreign countries (East, Southeast and South Asia in particular where the economy is registering a rapid growth). The Japanese government has recently made an amendment to the ImmigrationControlLaw,by which visa will be issued to foreign nationals having 'specified skills'. This will come into effect from April 2019 and 40,000 foreign workers are expected to come to Japan for work in the following year. These workers are permitted to stay in Japan for a maximum period of five years. On the other hand, the government does not intend to increase the number of immigrants who would stay in Japan for rest of their lives. The issue is still being debated in the Japanese Parliament, Diet,whether this is the best way to solve the problem of decreasing working population of the country (Japan Times 2019).

Such an attempt may have to be expanded also to the field of preservation of cultural properties. At the same time, as a result of recent relaxation ofterms and conditions for applying tourist visa to the countries mentioned, the inbound tourists are increasing in large numbers. Tourism is not a universal remedy and the number of tourists exceedingan acceptable range do cause a negative impact. That is why it needs to be controlled and managed properlyby keepinga close watch (use of the word 'tourism pollution' or 'over tourism'is becoming common in Japan).For example, the city of Kyoto,having population of about 2.6 million, recently faceda problem of tourist misbehaviour (both domestic and foreign). For example,running afterGeisha (Japanese women in traditional kimono and makeups, who are very disciplined professionals who were present to entertain guests by performing

Japanese traditional arts such as dance and singings) like paparazzis and taking their photographs, touching their kimonos(traditional Japanese garments); trespassing into private houses and compounds; walking and eating along the congested streets and entering shops and touching displayed products with dirty hands have gone beyond the tolerance level of local inhabitants including shop owners.Certain notification to tourists from travel agents, the municipality or even local inhabitants regarding the minimum rulesfor visiting Kyoto is becoming an essential issue.

An important aspect of tourism is the movement of people. Tourists (in a broad sense, this includes businesspeopleor scholars who attend meetings and conferences in a distance destination) move or travel to certain places or events because they are attracted to them.Nowadays, for example, even small local festivals could attract international tourists as they could gather information from social network services (SNS) and distinction between domestic and international is becoming more and more obscure.

Such a movement as a whole (prior condition of any movement related with tourism is obviously safety and peace)contributes to sustainingthe heritage component, making it the living heritage and would help not only to preserve the heritage but also promote regional development, benefitting the entire society and the world.

References

(All websites unless mentioned were accessed on 5 March 2019.)

Agency for Cultural Affairs. 2015. *Cultural Properties for Future Generations – Outline of the Cultural Administration of Japan*. Retrieved from http://www.bunka.go.jp/english/report/publication/pdf/pamphlet_en_03_ver04.pdf

Agency for Cultural Affairs. 2019a. Number of Designated Cultural Properties. Retrieved from http://www.bunka.go.jp/english/policy/cultural_properties/introduction/number, accessed 1 March 2019.

Retrieved from http://www.bunka.go.jp/seisaku/bunkazai/shokai/shitei.html, accessed 1 March 2019.

Agency for Cultural Affairs. 2019b. Basic Act on Culture and the Arts. Retrieved from http://www.bunka.go.jp/english/policy/foundations/index.html, accessed 1 March 2019.

Agency for Cultural Affairs. 2019c. Law on the Maintenance and Improvement of Historic Landscape in a Community. Retrieved from http://www.bunka.go.jp/english/policy/cultural_properties/law_landscape, accessed 1 March 2019.

Agency for Cultural Affairs. n.d.a. Japan Heritage Portal Site. Retrieved from https://japan-heritage.bunka.go.jp/en/index.html

Agency for Cultural Affairs. n.d.b. The Japan Heritage Logo. Retrieved from https://japan-heritage.bunka.go.jp/en/about logomark.html

Agency for Cultural Affairs. n.d.c. Japan Heritage brochure. Retrieved from https://japan-heritage.bunka.go.jp/en/img/about/nihon_isan_pamphlet_english.pdf

Cabinet Office. 2018. Situation of Aging (in Japanese). Retrieved from https://www8.cao.go.jp/kourei/whitepaper/w-2018/zenbun/pdf/1s1s_01.pdf

Coaldrake, W.H. 1996. *Architecture and Authority in Japan*. New York: Routledge.

Edwards, W. 2005. 'Japanese Archaeology and Cultural Properties Management: Prewar Ideology and Postwar Legacies', in *A Companion to the Anthropology of Japan* (J.E. Robertson Ed.), pp. 36–49. Oxford: Wiley-Blackwell.

Enders, S., R.C.T. and Gutschow, N. 1998. *Hozon: Architectural and Urban Conservation in Japan*. London: Edition Axel Menges.

Himeji City. 2019. World Heritage Himeji Castle. Retrieved from http://translate.city.himeji.lg.jp/LUCHIMEJI/ns/tl.cgi/http://

www.city.himeji.lg.jp/guide/castle.html?SLANG=ja&TLANG=en&XMODE=0&XCHARSET=utf-8&XJSID=0

Ishimori, S. and Nishiyama, N. 2001. *Advanced Studies on Heritage Tourism* (in Japanese). Senri Ethnological Reports, 21, National Museum of Ethnology, Osaka.

Japan Times. November 4, 2018. Japan expects acceptance of 40,000 foreign workers in first year of proposed new visas rules: sources. https://www.japantimes.co.jp/news/2018/11/04/national/japan-eyes-acceptance-40000-foreign-workers-first-year-proposed-new-visas-rules/#.XLLO0fZuIaE

Japan Tourism Agency. 2010. Paving the Way to a Tourist Nation. Retrieved from http://www.mlit.go.jp/kankocho/en/about/keiki.html

Japan Tourism Agency. 2019a. Tourism National Promotion Basic Law. Retrieved from http://www.mlit.go.jp/kankocho/en/kankorikkoku/index.html

Japan Tourism Agency. 2019b. Tourism National Promotion Basic Plan. Retrieved from http://www.mlit.go.jp/kankocho/en/kankorikkoku/kihonkeikaku.html

Kakiuchi, E. 2014. Cultural Heritage Protection System in Japan: Current Issues and Prospects for the Future. *GRIPS (National Graduate Institute for Policy Studies, Tokyo) Discussion Paper* 14(10):1–12.

Ketelaar, J.E. 1993. *Of Heretics and Martyrs in Meiji Japan: Buddhism and Its Persecution*. Princeton, PA: Princeton University Press.

Kyoto Project. April 14, 2009. Problems behind a Beautiful Image. http://thekyotoproject.org/english/problems-behind-a-beautiful-image/

Lew, C. 1995. The Meiji Restoration. Retrieved from http://www.calvinwlew.com/issuepapers/meijirevolution.htm

Ministry of Education, Culture, Sports, Science and Technology. 2009. The Protection of Cultural Properties. Retrieved from http://www.mext.go.jp/b_menu/hakusho/html/others/detail/1317481.htm

Ministry of Education, Culture, Sports, Science and Technology. n.d.. The Protection of Cultural Properties. Retrieved from http://www.mext.go.jp/b_menu/hakusho/html/others/detail/1317481.htm

Ministry of Foreign Affairs of Japan. 2016. Cultural Heritage. Retrieved from https://www.mofa.go.jp/policy/culture/coop/unesco/c_heritage/

Ministry of Health, Labour and Welfare. 2018. Vital Statistics in Japan (in Japanese). Retrieved from https://www.mhlw.go.jp/toukei/list/dl/81-1a2.pdf

Ministry of Land, Infrastructure and Transport. 2006. Landscape Act. Retrieved from http://www.mlit.go.jp/crd/townscape/keikan/pdf/landscapeact.pdf

Ministry of Land, Infrastructure and Transport. 2012. Tourism Nation Promotion Basic Plan. Retrieved from http://www.mlit.go.jp/common/000234920.pdf

Miyamoto, Y. 2009. A Study on Requirements for 'Sustainable Tourism': Two Process for Constructing the Concept (in Japanese). *Toho Gakushi*, 38(2): 11–22.

Nakamura, K. 1999. *Outline of Institution on Protection of Cultural Heritage* (in Japanese). Tokyo: Gyousei.

Nara National Research Institute for Cultural Properties. 2014. How many sites in Japan ? (in Japanese). Retrieved from https://www.nabunken.go.jp/nabunkenblog/2014/06/tanken23.html

Nishiyama, N. (Ed.). 2004. *Current Status and Issues of Cultural Heritage Management and Tourism* (in Japanese). Senri

Ethnological Reports, 51. Osaka: National Museum of Ethnology.

Nishiyama, N. Ed. 2006. *Building a Sustainable Relationship between Cultural Heritage Management and Tourism* (in Japanese). Senri Ethnological Reports, 61. Osaka: National Museum of Ethnology.

Osaka Prefectural Government. 2019. Mozu and Furichi Cluster of Kofun aiming for the World Heritage (in Japanese). Retrieved from http://www.pref.osaka.lg.jp/bunkazaihogo/bunkazai/sekaiisan.html

Ota, S.B. 2012. Some Issues in Archaeological Heritage Management in Japan – Lessons to Learn. *Puratan* 16:65–70.

Permanent Delegation of Japan to UNESCO. (2013). World Cultural and Natural Heritage in Japan. Retrieved from https://www.unesco.emb-japan.go.jp/htm/worldheritage_japan.htm#protection

Saito, H. 2005. Protection of Intangible Cultural Heritage in Japan. Paper submitted to *Sub-Regional Experts Meeting in Asia on Intangible Cultural Heritage: Safeguarding and Inventory-Making Methodologies* (Bangkok, Thailand, 13–16 December 2005) organised by Asia-Pacific Cultural Centre for UNESCO (ACCU), pp. 1–14.

Sakai City. (n.d.). Encyclopedia of Tomb of Emperor Nintoku (in Japanese). Retrieved from http://www.city.sakai.lg.jp/kanko/hakubutsukan/kofun.html#cmsNINHYA03

Sakai Tourism and Convention Bureau. (n.d.). Sakai Tourism and Convention Guide. Retrieved from https://www.sakai-tcb.or.jp/en/

Sannai-Maruyama site. 2014. Special Historical Site: Sannai-Maruyama site. Retrieved from http://sannaimaruyama.pref.aomori.jp/english/

Scott, G.R. 2003. Cultural Property Laws of Japan: Social, Political, and Legal Influences. *Pacific Rim Law and Policy Journal*, 12(2):315–402.

Sezgin, E. and Yolal, M. 2012. Golden Age of Mass Tourism: Its History and Development. Retrieved from http://cdn.intechopen.com/pdfs/35520/InTech-Golden_age_of_mass_tourism_its_history_and_development.pdf

SORA Office. 2018. Support for making unofficial *Yuru-chara*s of '*Koffun* & *Habikoffun*' for supporting registration of World Cultural Heritage registration. Retrieved from https://camp-fire.jp/projects/view/75823

TINAMI. 2019. Gotōchi-chara Catalogue. Retrieved from http://localchara.jp/

Tokyo National Museum. 2019. History of the TNM. Retrieved from https://www.tnm.jp/modules/r_free_page/index.php?id=144

United Nations. 2019. Sustainable Development Goals. Retrieved from https://sustainabledevelopment.un.org/sdgs

World Commission on Environment and Development. 1987. *Our Common Future*. London: Oxford University Press.

Wikipedia. (n.d.). Yuru-chara. Retrieved from https://en.wikipedia.org/wiki/Yuru-chara

Websites from which the figures in the text were retrieved

castle-himeji.com. 2015. Shiromaru-hime. Retrieved from https://castle-himeji.com/2015/04/shiromaruhime-gw/

Himeji City. 2018. Number plates for motor bikes. Retrieved from http://www.city.himeji.lg.jp/s10/2212247/_25083.html

Himeji Convention & Visitors Bureau. (n.d.). Retrieved from http://www.shiromaruhime.jp/contents/download/index.html

Kobe City Museum. n.d. Prosperous Port Kobe, Settsu Province, by Konobu Hasegawa. 1871. Retrieved from http://www.city.kobe.lg.jp/culture/culture/institution/museum/meihin_new/153.html

Sannai Maruyama Ruins Preservation and Utilization Promotion Office. n.d.. Special Historic site Sannai-maruyama site. Retrieved from http://sannaimaruyama.pref.aomori.jp/kids/sanmaru/

Sannai Maruyama site. 2012a. Sanmaru at Jomon Great Festival. Retrieved from http://sannaimaruyama.pref.aomori.jp/event/H27_daisaiten_kekka.html

Sannai Maruyama site. 2012b. Terracotta figurine. Retrieved from http://sannaimaruyama.pref.aomori.jp/photo/doki.html

Wikipedia. n.d.a. Taisei-houkan (in Japanese). Retrieved from Retrieved from https://ja.wikipedia.org/wiki/

Wikipedia. n.d.b. Haibutsu kishaku (in Japanese). Retrieved from https://ja.wikipedia.org/wiki/

Wikipedia. n.d.c. Hōryū-ji. Retrieved from https://en.wikipedia.org/wiki/Hōryū-ji

Wikipedia. n.d.d. Murals of the Golden Hall of Hōryū-ji (in Japanese). Retrieved from https://ja.wikipedia.org/wiki/法隆寺金堂壁画

Wikipedia. n.d.e. Daisen Kofun. Retrieved from https://en.wikipedia.org/wiki/Daisen_Kofun

Wikipedia Commons. n.d. Bodhi Ajanta. Retrieved from https://commons.wikimedia.org/wiki/File:Bodhi_Ajanta.jpg

World Commission on Environment and Development. 1987. *Our Common Future*. New York: Oxford University Press.

6. Archaeological Heritage Management Issues in Western India

M. Nambirajan

Abstract

Cultural heritage is the legacy of objects and intangible and tangible attributes of a society that are inherited from the past generations, maintained in the present and passed onto the future generations. Cultural heritage includes tangible culture (such as buildings, monuments, landscapes, books, works of art and artefacts), intangible culture (such as performing arts, traditions, language, and knowledge), and natural heritage (including culturally significant landscapes, and biodiversity). In the Indian context, it is the responsibility of the Government to protect and preserve the heritage sites and structures.TheArchaeological Survey of India (ASI), a department of the Central government of India, has been entrusted with the responsibility and has the mandate of performing the aforesaid duties. ASI has listed nearly 369 monuments as monuments and sites of national importance which include 29 World Heritage cultural properties. There are also 42 properties in the tentative list. Western India has eleven cultural properties which include Elephanta caves, Rani-ki-Vav, Ajanta and Ellora Caves Historic city of Ahmedabad, Mumbai and Champaner–Pavgadh Archaeological Park. Management of World Heritage properties is a complex issue with an emphasis on the preservation of the heritage structures, which are inseparable from the local communities. The current thinking adopts the view that cultural heritage belongs to the people, and therefore community involvement has to be ensured in most of the contexts. The solution to many of these issues are multi-dimensional and lies in Proper Conservation, Environment Development, Increasing Public Awareness, Public Involvement, Tourist Management, Planned Urban Development and Security. Developing well-drafted Master Plans prepared by a composite team of historians, archaeologists, ethnographers, town planners, landscape architects, engineers and conservation experts is a mandatory requirement. The challenges

of heritage management in India and the efforts made to address the challenges are presented in this paper.

Keywords: Heritage Management; Western India; Champaner–Pavgadh; Ahmadabad, Mumbai

Introduction

Cultural heritage is the legacy of objects and intangible as well as tangible attributes of a society that are inherited from the past generations, maintained in the present and passed onto the future generations. Cultural heritage includes tangible cultural properties such as buildings, monuments, landscapes, books, works of art and artefacts, and intangible cultural aspects such as performing arts, traditions, language and knowledge, and natural heritage elements including culturally significant landscapes and biodiversity. Objects and buildings are a part of the sources of study of human history, because they provide concrete evidence of our ancestors' ideas and technology. Their preservation demonstrates the recognition of the necessity of the past and of the importance of material culture that tells its story, in the contemporary context.

It is important to preserve the heritage remains, but at the same time it is also highly challenging due to the laws of nature, i.e. 'everything in nature shall deteriorate and disappear. They are in a constant state of chemical transformation'. This means what is considered to be preserved is actually changing; it is never as it once was when constructed or produced. The changes happen not only because of natural factors, but also due to human-made factors such as pollution (vehicular and industrial), high tourist inflow and poor conservation. Similarly, changing is the value of the property that each generation may place on the past and on the artefacts that link it to the past.

In the Indian context, it is the responsibility of the government to protect and preserve the heritage sites and structures. It is enshrined in Article 49 of the Indian Constitution that '*it shall be the obligation of the State to protect every monument or place or object of artistic or historic interest, [declared by or under law made by Parliament] to*

be of national importance, from spoliation, disfigurement, destruction, removal, disposal or export, as the case may be'.

The 74th amendment of the Constitution empowers the local bodies to be proactive in urban conservation. The Archaeological Survey of India (ASI), a department of the Central government of India, has been entrusted with the responsibility of performing the aforesaid duties of conservation of cultural properties.

Management of Protected Monuments and Sites

At present, there are 3691 centrally protected monuments in India. India has 29 cultural sites in the World Heritage list, out of which 27 sites are protected by the ASI and two are protected by the state governments and one by a trust. Besides, there are seven natural heritage sites, one mixed property and two railway properties.

Western India, comprising the states of Rajasthan, Gujarat and Maharashtra (Fig. 1), has 11 World Heritage properties, which include Elephanta caves, Rani-ki-Vav, Ajanta and Ellora Caves, historic city of Ahmedabad, Mumbai and Champaner–Pavgarh Archaeological Park. Each of them is unique and has impeccable outstanding universal value. The challenges that they pose are also different. India has enacted two legislations: (a) Ancient Monuments and Archaeological Sites and Remains Act, 1958 and (b) Antiquities and Art Treasures Act, 1972, to take care of the diverse varieties of archaeological cultural heritage. The former Act defines prohibited and regulated areas around the centrally protected monuments and imposes restrictions on constructions, reconstructions, renovations and repairs. The permissions for such repair and renovation activities in the prohibited area are given by the designated competent authorities at the state level and, in the regulated areas, permissions for new constructions are given by the National Monuments Authority, New Delhi. Simultaneously, monument-specific by-laws for each of the centrally protected monuments are being prepared with an intention to regulate height and façade designing. Features such as visual impact, skyline, vernacular architecture, effects of vibration and pollution are considered in the preparation of such by-laws.

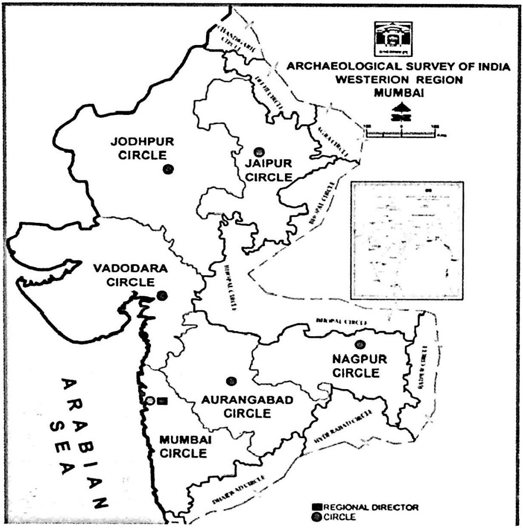

Fig. 1. Map of the Circles of Archaeological Survey of India in the Western Region (Source : ASI)

Management of World Heritage properties is a complex issue with an emphasis on the preservation of the structures and monuments, which are inseparable from the local community. Modern thinking takes the view that cultural heritage belongs to the people, therefore community involvement has to be ensured for a better management of the heritage sites.

Challenges in Heritage Management

Heritage management in India is a complex issue with the involvement of numerous stakeholders and agencies. The challenges faced by the heritage managers in India include the following:

- Threat from population growth and drift of population from rural area to urban areas seeking jobs
- Growth of industries and urbanisation
- Demand for housing and government policies and schemes
- New constructions and commercial activities
- Increase in vehicular movement resulting in the construction of flyovers, roads, metropolitan transport systems leading to pollution and visual impact
- Creation of tourism circuits and tourism-related infrastructure
- Result of urban pressure; about 50% of Indian population lives in cities
- Lack of awareness among public sometimes even among the town planners
- Vandalism of various kinds

We shall describe some of the important World Heritage properties in the western region of India before looking into the specific management issues that these monuments face.

World Heritage Properties of Western India

Ajanta Caves (1983)

The earliest Buddhist cave monuments of Ajanta are datable to 2nd and 1st centuries BCE. Later, during the Gupta period (5th and 6th centuries CE), many more richly decorated caves were added to the original group of monuments. The caves, paintings and sculptures of Ajanta are considered masterpieces of the Buddhist art and architecture across the world. This property was inscribed in the World Heritage

list in 1983. As the caves are located in the reserved forest area, the caves face less threat from the urban development but are impacted by tourism activities.

The Elephanta Caves (1987)

They are located on the Elephanta Island (otherwise known as the Island of Gharapuri), in western India, which features two hillocks separated by a narrow valley. The small island is dotted with numerous archaeological remains that stand testimony to the rich cultural heritage of this area. These archaeological remains reveal evidence of occupation from as early as the 2nd century BCE. The rock-cut caves were excavated around the mid-5th to 6th centuries CE (Fig. 2.). The

Fig. 2. A view of the Elephanta cave (Source : ASI)

most important among the caves is the Cave 1, which measures 39 metre from the front entrance to the back. On plan, this cave in the western hill closely resembles Dumar Lena cave at Ellora. The main hall of the cave, excluding the porticos on the three open sides and the back aisle, is 27 metre in square and is supported by rows of six columns each. The 7-metre-high masterpiece "Sadashiva" sculpture dominates the Cave 1. The sculpture represents three aspects of Shiva, the creator, the preserver and the destroyer, identified, respectively with Aghora or Bhairava (left half); *tatpurusha* or Mahadeva (full face in the centre) and Vamadeva or *Uma* (right half). Representations of Nataraja, Yogishvara, Andhakasuravadha, Ardhanarishwara, Kalyanasundaramurti, Gangadharamurti, and Ravana anugrahamurti – various forms of Lord Shiva – are also noteworthy for their concept, dimensions, themes, representations, content, alignment and execution.

The layout of the caves, including the pillar components, the placement and division of the caves into different parts, and the provision of a sanctum or *garbhagriha* is an important development in rock-cut architecture. The Elephanta Caves emerge from a long artistic tradition but demonstrates refreshing innovation. The combination of aesthetic beauty and sculptural art, replete with respondent *rasas*, reach an apogee at the Elephanta Caves. Hindu spiritualistic beliefs and symbology are finely utilised in the overall planning of the caves. The property is protected primarily by the ASI, which also undertakes the management of the Elephanta Caves with the assistance of other departments, including the Forest Department, Tourism Department, Mumbai Metropolitan Regional Development Authority (MMRDA), Urban Development Department, Town Planning Department and the gram panchayat of the government of Maharashtra, all acting under the various legislations of the respective departments. The management issues here are limited to high tourist footfall, leading to tourism-related infrastructure development, unauthorised vendors and conservation problems arising from natural weathering of rock and coastal climate conditions. A masterplan has been prepared by the Maharashtra state government, wherein relocation of vendors, expansion of approach pathway, tourist facilities like shopping plaza, food plaza and even

a ropeway from main land to Elephanta has been proposed. The conservation issues are addressed by the ASI.

Champaner-Pavgarh Archaeological Park (2004)

Located in Panchmahal district in the state of Gujarat, this is a concentration of unexcavated archaeological, historic and living cultural heritage properties cradled in an impressive landscape, which includes prehistoric (Chalcolithic) sites, a hill fortress of an early Hindu capital and remains of the 16th-century capital of the state of Gujarat. The site also includes, among other vestiges, fortifications, palaces, religious buildings, residential precincts, agricultural structures and stepwells and tanks, dating from the 8th to the 14th centuries.

Ellora Caves (1983)

Ellora is another important site with numerous rock caves, some of which are excellent representations of Indian architectural tradition. Here there are 34 caves spread across a 2 km distance, which are carved along a high basalt cliff. The monolith of Kailasanatha is a masterpiece of the Rashtrakuta period (Fig. 3.). With its uninterrupted sequence of monuments dating from 600 to 1000 CE, it represents a high degree technological and artistic skill, and religious harmony of the day. The management issues include high tourist footfall, tourism-related infrastructure development, heavy traffic in the vicinity, conservation problems due to natural weathering, heavy rainfall and bat-droppings. The solution lies in proper conservation, environment development, increasing public awareness, public involvement, tourist management, planned urban development and security. Having a well-drafted masterplan prepared by a team of historians, archaeologists, ethnographers, town planners, landscape architects, engineers and conservation experts is a mandatory requirement in this context.

Historic City of Ahmedabad (2017)

The historic city of Ahmedabad founded by Sultan Ahmed Shah in 1411 CE on the pre-existing historic sites of Ashaval and Karnavati is bestowed with magnificent Indo-Islamic monuments and exquisite Hindu and Jain Temples. The traditional settlement planning of the old city, comprising numerous pols, self-contained neighbourhood, traversed by narrow streets, usually terminating at a square or chowk

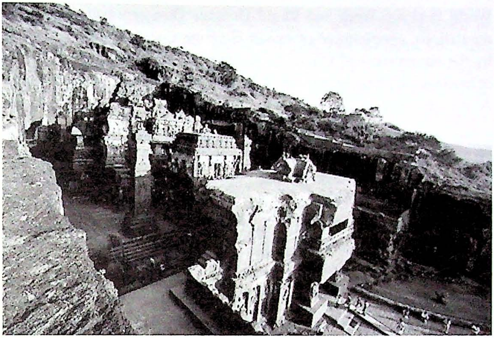

Fig. 3. A View of Kailasanatha Temple, Ellora (Source : ASI)

with community well, bird feeder and Mohella Mata temple (local deity) is unique to the old city of Ahmedabad. It is for this outstanding universal value that the city has been inscribed on the World Heritage city by the UNESCO under criteria (ii) and (v), which are listed below.

Criteria (ii): Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.

Criteria (v): Be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment specially when it has become vulnerable under the impact of irreversible change.

Ahmedabad Municipal Corporation (AMC), realising the need for the conservation of the city's rich heritage, set up the first ever heritage cell in the country in an urban local body (ULB) as early as in 1996. Since then, a number of heritage conservation initiatives right from awareness creation, launching of heritage walks, listing of heritage buildings and structures, lectures, seminars, celebrations of

World Heritage Week and World Heritage Day, approval of heritage regulations, appointment of expert Heritage Conservation Committee by the government of Gujarat, including conservation and restoration of heritage buildings, which has led to the World Heritage inscription of Ahmedabad in July 2017.

The city has 54 ASI-protected monuments, out of which 28 are located within the historic World Heritage city, and three among them are state-protected monuments. AMC has listed and notified 2236 residential and 449 institutional buildings in the historic city. The World Heritage city (property) covers the entire walled city area and at least 200 metre all around has been taken as buffer zone for the World Heritage City inscription. The world heritage property area spans 5.5 square metre approximately with a population of nearly 400,000 people.

The property is governed by quite a few legal frames works such as Gujarat Town Planning and Urban Development Act, 1976 and its Rules, 2007. The centrally protected monuments are governed by the AMASR Act, 2010 (amendment).

The major issues include thick population, business activity in the walled city with residences, shops and warehouses with ever growing demand for new constructions, renovation and additions. It is impossible to curb business activities as the livelihood of large number of people depend on these commercial activities. One cannot alienate a segment of the stakeholders, i.e., the local community. There is also possibility of unauthorised constructions, expansion and encroachments. Heavy traffic in the area causes pollution. The above-said acts and legal frameworks regulate constructions and repairs. The state government has made efforts to regulate traffic by declaring some parts of the walled city as no-vehicle zone and offering alternate land to the local community.

An interesting scheme was introduced by the Ahmedabad Municipal Council named Transferable Development Rights (TDR). Broadly speaking, it is the development potential of the land (benefit arising from land), which was suspended because of the reservation of land in the Development Plan for Ahmedabad to be acquired for

public purposes (reserved land). In order to avoid the payment of heavy compensation and the lengthy proceedings involved, the state government found an exclusive way of compensating the landowner under which the development potential of the land is detached from the reserved land itself, the land stands transferred to the government and, in return, the development rights, equal to the development potential attached to the reserved land, are transferred to the owner, to be used in some other land. The owner of the reserved land is thus compensated by additional floor space index (FSI), which can be used on some other land over and above the normal FSI permitted in relation to that piece of land. The scheme has become highly successful and has reduced development pressures in the World Heritage area.

Hill Forts of Rajasthan (2013)

The serial nomination of six imposing forts, situated in the state of Rajasthan, includes the ones located in Chittorgarh, Kumbhalgarh, Sawai Madhopur, Jhalawar, Jaipur and Jaisalmer. The grand architecture of the forts, some with up to 20 km in circumference, bear testimony to the power of the Rajput princely states that flourished from the 8th to 18th centuries. Enclosed within defensive walls are palaces, temples and other buildings including some structures, which may predate that the fortifications itself.

The overall management of the six properties (hill forts) is steered by the State Level Apex Advisory Committee, which was established by the Rajasthan government in 2011. It is chaired by the Chief Secretary of Rajasthan and comprises members of the concerned ministries, namely Environment and Forests, Urban Development and Housing, Tourism, Art, Literature and Culture, Energy and various representatives of the heritage sector including the ASI. The Apex Advisory Committee meets on a quarterly basis and is designed to constitute the overall management framework of the serial property, guide the local management of the six serial components, coordinate cross-cutting initiatives, share research and documentation, share conservation and management practices and address the requirements of common interpretative resources.

Different forts throw different management challenges. To quote an example, the Jaisalmer fort rests on a succession of medium to coarse-grained sandstones with interbeds of shale, claystone and occasional lignite that rest over Lathi Formation. Its very crust is soft rock and hence susceptible to collapse. Another major issue is the commercial exploitation of the fort. Inside the fort there are heritage buildings, residences and commercial establishments. There are encroachments on the fort wall and bastions resulting in excessive load on the walls. Night soil is also released into the fort walls. The advisory committee has made efforts to address these issues. The heritage management plan is under preparation.

Rani-ki-Vav (2014)

'Rani' means queen and 'Vav' means well. Rani-ki-Vav is an exceptional example of a distinctive form of subterranean water architecture of the Indian subcontinent – the stepwell, which is located on the banks of the Saraswathi river in Patan (Figs. 4-6). Initially built as a memorial in the 8th century CE, the stepwell was constructed as a religious as well as functional structure and designed as an inverted temple highlighting the sanctity of water. Rani-ki-Vav is a single-component water management system divided into seven levels of stairs and sculptural panels of high artistic and aesthetic quality. It is oriented in an east–west direction and combines all of the principal components of a stepwell, including a stepped corridor beginning at the ground level, a series of four pavilions with an increasing number of storeys towards the west, the tank and the well in the tunnel shaft form. More than 500 principal sculptures and over a thousand minor ones combine religious, mythological and secular imageries, often finding references in the literary works.

Rani-ki-Vav impresses not only with its architectural structure and technological achievements in water sourcing and structural stability, but also in particular with its sculptural decoration of true artistic mastery. The figurative motifs and sculptures, and the proportion of filled and empty spaces, provide the stepwell's interior with its unique aesthetic character. The setting enhances these attributes in the way in which the well descends suddenly from a plain plateau, which

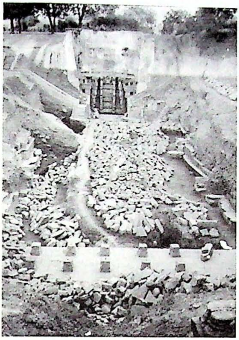

Fig. 4. Rani-ki-Vav before Conservation (Source : ASI)

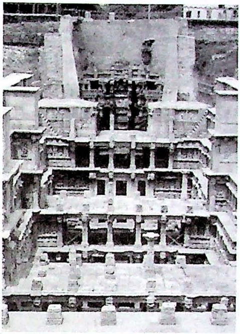

Fig. 5. Rani-ki-Vav after Conservation (Source : ASI)

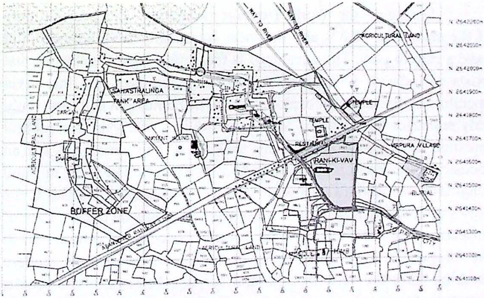

Fig. 6. Rani-ki-Vav Core and Buffer Areas (Source : ASI)

strengthens the perception of this space. The property does not face much management issues, except the laying of dedicated cargo railway line in the vicinity. With much persuasion, the railway line has been shifted to a safe distance.

Victorian Gothic and Art Deco Ensembles of Mumbai (2018)

Mumbai implemented an ambitious urban planning project in the second half of the 19th century. It led to the construction of ensembles of public buildings bordering the oval *maidan*-open space, first in the Victorian neo-gothic style and then, in the early 20th century, in the art deco idiom. The first one includes Indian elements suited to the climate, including balconies and verandas. The art deco edifices, with their cinemas and residential buildings, blend Indian design with art deco imagery, creating a distinct style that came to be known as Indo-Deco. These two characteristics bear testimony to the phases of modernisation that Mumbai underwent during the 19th and 20th centuries. As far as management issues are concerned, they are very similar to the one faced by Ahmedabad, rapid urbanisation and lack of landscape to expand horizontally and hence Mumbai is growing vertically.

Conclusion

Managing the World Heritage property is the primary duty of the state. The NGOs and the local community have an important have a role to play. The advantage is the strong legal framework that exists in India. It is imperative that the government and the travel operators understand that exploitation of the monument and site would only endanger the property, leading to the loss of a valuable cultural resource. The regulating agencies shall know that heritage is not an industry to generate profit and shall perform duties keeping in mind long-term implications of mismanagement. Sustainable tourism is the only way forward. Also, in the recent past, emphasis on preservation of material culture to encompass the broader concepts of culture, which are inseparable from the lifeways of the local communities. Modern thinking takes the view that cultural heritage belongs to the people, therefore, their easy access to cultural heritage has to be ensured.

References

Ahmedabad Municipal Corporation. 2016. *Nomination Dossier for Inscription on the World Heritage List*. Ahmedabad.

Archaeological Survey of India. 2010. *Indo-Japanese project for the Conservation of Ajanta Paintings, 2008*. Tokyo.

Director General CPWD. 2013. *Handbook of Conservation of Heritage Buildings*. New Delhi : Central Public Works Department.

Labadi, S. 2013. *UNESCO Cultural Heritage and Outstanding Universal Value*. Walnut Creek, CA: AltaMira Press.

UNESCO. 2013. *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris: UNESCO World Heritage Centre.

Yazdani, G. 2014. *Ajanta*. New Delhi: Cosmo Publications.

7. Ethnic Tourism as Alternative Development in the Lower Omo Valley, Ethiopia

Nishizaki Nobuko

Abstract

Sub-Saharan Africa comprises one of the fastest growing tourism markets in the world. Many contemporary state agencies in Sub-Saharan African regard tourism as a major opportunity for economic development. Since the mid-2000s, the Ethiopian federal government has promoted tourism and developed infrastructure facilities and services for well-managed tourism that offers thousands of enticing experiences and a safe stay for foreign tourists, as well as job opportunities for the local communities. As a result, ethnic tourism in the southern Ethiopia is growing rapidly.

The federal government has implemented massive regional development measures related to conservation, agriculture and tourism in the Lower Omo Valley. In the case of southwestern Ethiopia, several parcels of land that were traditionally used by the local population were converted into agricultural land. Ethnic tourism is another form of development that has grown rapidly in recent years. The body ornamentation and painting of the agro-pastoralists in the lowlands are popular among foreign tourists. Western and Asian tourists have also helped draw international attention to traditional lifestyles of local people and the region's 'untouched' wilderness. As the government considers pastoralism as a backward, uneconomic and devoid of modern development components, it recommended the transition from a pastoral lifestyle to one based on modern agriculture.

This paper discusses the impact of tourism on ethnic minorities in the area by analysing their livelihoods and attitude towards tourists. Then, it investigates whether tourism is effective in benefiting local people as an alternative development. This study also considers the meaning of 'community-based' initiatives in ethnic tourism.

Keywords: Ethnic Tourism, Traditional Culture, Sustainability, Development, Community-based Alternative; Heritage Tourism.

1. Introduction

Sub-Saharan Africa is one of the fastest growing tourism markets in the world. Many contemporary state agencies in Sub-Saharan African regard tourism as a major opportunity for economic development. In most developing countries, tourism is expected to contribute to reducing poverty, creating job opportunities and preserving an area's environment (Christie *et al.* 2014); thus, government agencies, local and international non-governmental organisations (NGOs), development planners and the business sector have planned most development strategies. Conversely, unbalanced power relations and the distribution of economic interests occur easily at tourist sites in developing countries (Urry 1990), so that the alternative tourism such as sustainable tourism, responsible tourism and pro-poor tourism are expected to correct these negative aspects (Goodwin 2011; Buckley 2012).

From the mid-2000s, the Ethiopian federal government has also promoted tourism, aiming to acquire further foreign exchange and developing infrastructure facilities and services for well-managed tourism that offers thousands of enticing experiences and a safe stay for foreign tourists, and job opportunities for local communities in rural areas. Consequently, the federal government is urging a large number of tourists to visit some of the country's most remote areas (WTTC 2017). Historical sites in the north and ethnic tourism in the southwest are proliferating, with safaris remaining weak in low numbers due to lack of diversity of wildlife.

In south-eastern Ethiopia, classical, ethnic tourism is popular among foreign tourists, unlike alternative tourism or tourism development, which is expected to be a 'panacea' (Cornelissen and Junko 2018; Nobuko 2019). The Ethiopian federal government has viewed tourism in the area negatively, and the unequal relationship between guests and hosts has been criticised (Turton 2004; LaTosky 2014). However, the hosts have positively accepted guests regardless of the outsider's critical view. This paper discusses the impact of tourism on ethnic minorities in the area by analysing their livelihoods and attitudes

towards tourists. It then investigates whether tourism is effective in benefiting local people as an alternative development mechanism.

2. Research Area and Method

Ethnic tourism is particularly prevalent in the South Omo Zone in the Southern Nations, Nationalities, and Peoples' Region (SNNPR) (Fig. 1). This area is famous as a UNESCO's world cultural heritage site. I focus on the Mursi people, who are the most known among foreign tourists, and the Ari people who entered the tourism business recently. The field survey was conducted in and around Jinka town in the centre of the South Omo Zone for three weeks each in January 2013, February 2014, February 2015, September 2016 and September 2018. Jinka town is located at an altitude of 1,400 metre. The average temperature is 21° C, and rainfall is about 1,200 mm per year. The rainy season lasts from April to May and again from October to November.

3. Development of Ethnic Tourism

3.1 Regional Development

The south-western part of Ethiopia is frequently subject to political intervention by the ethnic groups operating from the northern

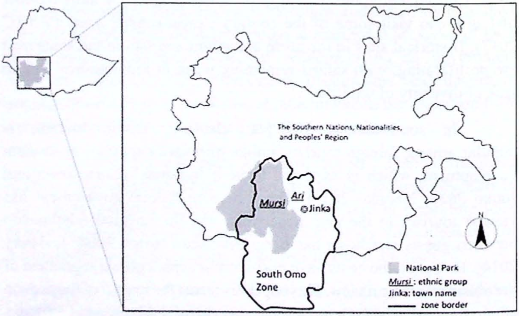

Fig. 1. Research Area (Source : author)

part of the country. Large-scale development projects, however, were not executed until the 2000s. Because of their distance from the centre, they have been marginalised for a long time. In East African countries, the establishment of wildlife-protected areas attracted safari tourists, whereas roads and accommodation facilities were not well developed in the area. Only a very few backpackers and photographers visited these sites, and both safari and ethnic tourism remained sluggish.

Regional development changed suddenly in the 2000s. Several parcels of land traditionally used by the agro-pastoralists were converted into large-scale commercial plantations. Ethnic tourism is another form of development that has proliferated in recent years. In the 2000s, a trunk road connecting the capital city and the town of Jinka was constructed, as were transport roads for plantations, and several new accommodations in the town. This improved infrastructure enabled the area to become a major tourist destination, and the number of tourists in the South Omo Zone, which numbered 3,879 in 2004 increased sharply to 33,100 in 2013 (South Omo Zone Tourism and Cultural Office 2013). Tourists frequently come from European countries such as Spain, Germany and the United Kingdom, followed by the United States, Israel, Scandinavia and others. Additionally, tourists from Asian countries such as Japan, China, South Korea and diaspora tourists have been increasing in recent years.

3.2. The Government's View on Ethnic Tourism

The 'tribal south' is a symbolic phrase used by tour operators to explain this area's ethnic tourism. Some guidebooks emphasise the area's 'wilderness', 'primitiveness' and 'original culture' by focusing on the agro-pastoral society, and the majority of international tourists expect to encounter an 'unchanged' culture. The body ornamentation and painting of the agro-pastoralists in the lowlands are popular among foreign tourists. Western and Asian tourists have also helped draw international attention to traditional lifestyles of local people and the region's 'untouched' wilderness. However, the Ethiopian federal government has mixed feelings about this rapid increase in the number of tourists. In Prime Minister Meles Zenawi's speech on the 13th

'Pastoral Day' held on 25 January 2011, in Jinka, tourism in the area was mentioned.1[1]

> ...There are some people who say they are concerned for the pastoralists, but really they want the pastoralists and their lifestyle to remain as a tourist attraction forever. The pastoralists don't want to live as a tourist attraction. They want a stable, improved life. Taking this into consideration we should ignore the false propaganda of people who want pastoralists to be a tourist attraction. We are standing strongly by the idea of creating opportunities for pastoralists to live securely according to their own interests. Providing the necessary support will be the key feature of our development work in pastoralist areas....

The Ethiopian federal government views pastoralism as backward, uneconomical and in need of modern development. So the government recommended the transition of the pastoral lifestyle to modern agriculture. They also considered grazing land used by agro-pastoralists as under-utilised 'no man's land' and converted it into commercial agricultural land invested in by the government or private companies. The government believes escaping traditional livestock livelihoods will lead to regional development and says it will not tolerate the portrayal of its residents as living in 'undeveloped' areas to satisfy tourists' expectations. Therefore, the Ethiopian government does not enthusiastically participate in its tourism projects, including community-based tourism (CBT) as a local alternative tourism. Contrary to government's intention, however, many tourists were interested in 'traditional' pastoral society. How do the tourists consume traditional culture?

3.3. The Mursi's Tourism

Tourists will travel around the South Omo area for four to seven days, coinciding with the local market day and the distinctive features of each ethnic group. Most tourists visit several settlements

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1. You can read the manuscript in English. Url: http://www.mursi.org/pdf/Meles%20Jinka%20speech.pdf, accessed May 2019.

to take pictures of the local communities. 'Traditional culture' and the lifestyle of agro-pastoralists interest them the most. Even though there are some differences between ethnic groups, the tour style has been standardised, such as the entry fee, which has been set from 100 to 500 birr[2] per group in recent years. The Mursi people, with a population of about 7,000, are the most popular agro-pastoral society among tourists. Their main livelihoods involve grazing livestock and the cultivation of sorghum. Their society is highly mobile (Turton 1978).

Tourism has changed since the state-owned sugarcane plantation, about 240,000 hectares large, began operations in 2011. Consequently, the area the Mursi traditionally used for grazing livestock has been getting smaller. All-weather roads are maintained, and the guests visit the tourist villages on a half-day trip from Jinka town regardless of the season. Guests have to take a local guide from the Jinka Guide Association, and each group pays a guide fee of 200 birr to the association.

2. 100 *birr* = 4 USD.

Fig. 2. The tourist village (Source : author)

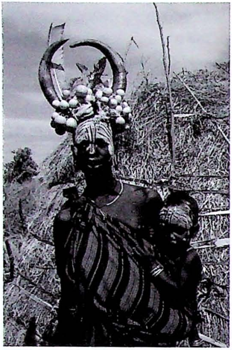

Fig. 3. Mursi women with decorated headdress (Source : author)

At the village, the guide first explains the social structure, culture, rituals and so on (Fig. 2). The traditional lifestyle of the Mursi is their main topic, but contemporary problems such as plantation operations, which people consider a problem is never explained. In general, performances such as songs and dances that are common in African ethnic tourism are not conducted. Tourists take pictures as soon as the guide's explanation finishes. The tourists decide the targets of their cameras, and the Mursi request them strenuously by shouting 'photo, photo' to gain attention. If the tourists do not hear their voice, they persistently call out by touching their bodies. Women with lip plates and men with decorated bodies have long attracted many tourists, but they are changing their appeal to the tourists to attract tourists' attention by making excessive decorations on the body, heads or posing (Fig. 3). Tourists try to take as many good pictures as possible, and the Mursi are expecting to take as much payment as possible. Some Mursi stand by themselves behind other people taking their picture and earn as much as possible. The tourist raises his voice to 'move' and the man replies, 'pay money for taking photos'. It is clamorous in the village during the tourists' stay for about 30 minutes only, and the village returns to a quiet space as usual after the tourists leave. The Mursi remove all the body decorations, and start grazing, collecting firewood, cooking and eating.

The entrance fee is 200 birr per group, which is paid to the chief of each settlement, and the photography fee is transferred between individuals in cash. Each tourist pays the cost on the spot immediately after taking photographs of an individual. The basic cost per person is 5 birr, and, if infants accompany women, 5 birr will be added. Fees are

used at the time of unexpected situations such as a sudden illness in the settlement. As for individual earnings, men with the most income in the high season make 150 birr per day and 20 birr in the low season, going by interviews with 20 people in 2017. Since guests visit the settlement almost every day in the high season, this is a substantial individual income and quite different from the case of Samburu tourism in Kenya (Nakamura 2017), where local people have an insignificant income. There are three reasons for substantial income. First, profit from photography belongs to individuals; second, the small number of tourist villages has not produced competition yet; third, tourists are most interested in visiting the Mursi village as a wildlife viewing tour. They use the money for drinking alcohol and purchasing daily products and food. However, there are differences in pay between individuals, and the number of tourists differs according to the season. Political instability in September 2016 has dramatically affected tourism in the area. For the Mursi to secure a livelihood, it is prudent for them to maintain livestock, farming or take side jobs in the local tourism industry.

The federal government has explained that a series of development projects would provide employment opportunities for the Mursi and technology would be used to transition to modern agriculture. However, the Mursi have lost a wide range of pastoral lands and have gained only poor job opportunities, for example, as a security guard hired temporarily at a plantation. The salary is poor, and the Mursi cannot acquire the kind of job they want. Even if they want to move elsewhere, they cannot find pastureland because of a national park established during the socialist regime, where illegal grazing is strictly prohibited. Meanwhile, the tourism industry gives the Mursi an indispensable source of cash income.

In an interview with the guests, some made statements like 'I succeeded in taking the best pictures' *(Japanese tourist,* 8 February 2014), 'Mursi talk only two words; money and photo, so I was disappointed' (Spanish tourist, 6 September 2016). In addition to expectations for sightseeing, guests reinforce the stereotypes based on a 'disappointing experience' while satisfying their desire for pictures

and distributing them by SNS globally. The guide explains the society and culture, but often gives stereotypical explanations of an 'isolated nomadic tribe'. Their emphasis is on static, 'traditional' cultures. The Mursi in the tourist village serve as good models to bring in cash without the need for guides providing any explanations of their culture. The guides neither confirm nor deny positive outsider explanations, and never mention critical issues that they face today.

3.4. Local Guides in Ethnic Tourism

In recent years, guides are playing significant roles in interpreting traditional culture for the tourists, and the government has focused on increasing the number of qualified guides to support the establishment of guide associations in rural areas. The first local guide organisations in the South Omo Zone were established in 2005. These were New Vision and Pioneer, based in Jinka town. The two organisations were integrated in 2014 and became the Jinka Town Guide Association, encompassing 26 guides in it.

Most members of the associations are young men in their twenties. Ethnic minorities in the area are an Ari man who joined the association in 2015, while others are from different ethnic backgrounds. Most of these guides have not received expert training in tourism; however, as a new trend, three guides with a degree in tourism participated in the association. Most guides take tourists to the Mursi settlement. Guides are in charge of rotations among 26 members; therefore, the opportunity for a guide to work is once or twice a week in the low season and almost every day in the high season. A guide will receive 100 to 200 birr per month in the low season and 1,000 to 2,000 birr per month during the high season. They are aware of the instability of the tourism industry; therefore, they usually have other jobs such as a small Bajaji (small three-wheeled taxis) driver.

4. The Ari's Tourism

4.1. Guide Association

The Ari people, whose 'traditional' culture is not represented in the agro-pastoral sector, have recently become involved in the ethnic tourism industry. Ari society has the largest population in the South Omo Zone, and they live in the lowlands, being largely dependent

on agricultural activities. They cultivate ensete (*Ensete ventricosum*, commonly known as 'false banana', the area's most important root crop), taro, yams, maize, barley, wheat, teff (*Eragrostis tef*) and other crops. They are also engaged in raising livestock, honey collection and hunting. Ari settlements did not become major tourist destinations until the number of tourists visiting remote Mursi villages dramatically increased. Tourism companies and the Jinka Town Guide Association began to find new tourism destinations in the Jinka town.

Village K (population of about 3,500) has witnessed the most active tourist activity. Initially, Ari's 10 young men established and organised a guide association called the NegeSewi[3] Local Guide Association in 2010. All 10 guides graduated from the same high school, and currently attend the same Protestant church.

4.2. Everyday Life as a Tourism Commodity

Guests staying in Jinka town can easily visit village K. First, they pay the entrance fee of 250 birr per person to the guide association. The price includes a guide fee for village walks, which take about 30 minutes. There is no additional fee for taking pictures, nor do they directly exchange cash between guests and hosts. In agro-pastoral settlements, tourists spend most of their time taking pictures, but everyday life is treated as a tourist resource in Ari villages. Tourists walk through the village within about 0.5 near the association's office with a local Ari guide, who tells them the names and the characteristics of local foods such as bananas, mangos, grains, ensete, yams, pumpkins, cassavas and some local spices. Tourists are invited to attempt cooking local foods and taste them onsite. The guide also explains how the local beer is brewed, and the tourists are given some alcohol to taste if they wish. The village's main attraction is an artisanal workplace where tourists can watch professional blacksmiths and potters at work. Usually, pottery is women's work to be sold in the local market (Fig. 4). Men sometimes help to collect clay and mostly engage in agriculture. Blacksmiths are men, and they show their work with the guide's interpretation, but don't sell any products. Dancing and singing performances are only offered during the harvest season when the locals dance.

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3. This means 'tomorrow's person' in Amharic.

Fig. 4. Ari pottery work place of pottery's woman (Source : author)

The Ari's guides participate in almost every phase of tourism encounters such as by arranging a tour with tour companies, collecting the entrance fee in the office and paying villagers who provide service for the tourists. Each guide has his own preferred tour route and chooses which sites will be seen. The guide negotiates with several villagers in advance to accept guests because local food and beer are prepared in advance, and they offer basic explanations about Ari's society and culture, responding to guests' questions at any time as with the Mursi tourism.

The government of Ethiopia and guests have a common view in recognising the local society as an 'unchanged culture'. The Ari recognise everyday life as a tourist resource and try to represent this in the village as different from that of agro-pastoralists. They emphasise their rich agricultural landscapes using their own interpretations. Some tourists have been satisfied with their hospitality and easy billing. Others stated, 'we were extremely disappointed when they were wearing the same clothes as us'. There are some gaps between the hosts' lifestyles

and the guests' expectations that the area will be 'backward'. However, this gap makes village tourism more valuable and provides additional tourist destinations.

4.3. Income from tourism

There are a large number of tourists from the end of September to March compared to the rest of the year. This is the high season for tourism, and it corresponds with the agricultural off-season. So the guides effectively balance the agricultural and tourist seasons. The number of tourists from 2013 to 2014 was 1,904, and the income was about 476,000 birr (Fig. 5). The largest number of guests was in November and December, with 380 guests (76 pairs) visiting the place. The village walk is conducted over an area of about 0.5 km^2 near the association office, and the people involved include potters, blacksmiths and women who cook local food. Special skills are not required to cook local food or to brew local beer, so every woman visitor can participate in this. The Ari mainly perceive tourism as a source of cash, and half the entrance fee is divided among those who are involved in the tour. The other half is saved for the future. Presently, the villagers are closely connected with the guides and considerably benefit from

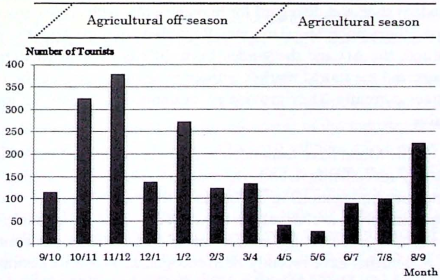

Fig. 5. The number of Tourists in Ari's village K from 2013 to 2014 (Source : Village K's Guide Association)

them economically. In an interview with an Ari guide in January 2015, I was told that they are delighted to have a chance to be engaged in tourism, because it is estimated that each guide earns about 1,000 to 5,000 birr per month in the highest tour season.

Tourism is an extension of the villagers' daily lives. People are somewhat involved in the tourism business, but they spend most of their time on agriculture, blacksmithing and making pottery. Nobody is thinking about devoting themselves entirely to the tourism business. The locals have not even tried making souvenirs. Since visiting an Ari village is still a new phenomenon in the area, it is not yet a highly competitive business. Therefore, the business of guiding, which requires only a small investment, can provide a new means of subsistence and is an attractive occupation, especially for young people.

5. Summary and Discussion

With large-scale government-led development programs, a major destination promoting mass tourism was newly formed in the south-western part of Ethiopia. African classic ethnic tourism selling 'tradition' has steadily increased the number of tourists to the region. Ethnic tourism in south-western Ethiopia was not initiated by state, enterprises, NGOs or investors; instead, it has been criticised for its premodern style and disregard for human rights, with critics especially targeting the popular Mursi tourism. Regardless of the outsider's 'gaze', the Mursi, the Ari and the guides from different ethnic backgrounds have entered the tourist market without investing to secure the tourist resources currently. They provide an example of a bottom-up tourism initiative.

The Mursi have responded to the needs of sporadically visiting tourists by specialising in body decoration to attract photography. They left irksome explanations in the hands of their town's guides, and they devote themselves exclusively to the subjects of the photograph, using the body as a resource and concentrating on individual payment. The Ari's settlements have recently been recognised as tourist destinations and they have also entered the tourist business. However, major attractions of everyday life are found in rural areas. The Ari's guide association controls tourism with the other villagers' cooperation. All

earn relatively high cash incomes from tourism and control tourism to have a low impact on the community. Here, local people have created space for new economic gains that have resulted in sustained social benefits. Conversely, they regard tourism as an extension of daily life and have not been interested in starting new businesses, such as making souvenirs except for those youths who are actively involved in tourism.

Another point to note is the re-evaluation of 'traditional' culture. In ethnic tourism in other areas, there are some movements to rediscover traditional cultural values and re-evaluate culture and identity (Saarinen 2009; Mitchell and Ashley 2010), while economic interests are emphasised in the Ari and the Mursi cases. Even as the government criticises the area's tourism, the villagers can enter into it on their own accord, and largely control what tourism brings to their community. The third point is that tourism is basically conducted by individuals, not as a 'community-based' effort. The Mursi people mainly personally negotiate with the tourists for payment. Guides with different ethnic backgrounds are essentially separated from the community. The Ari's guides only have to be conscious of the community. However, limited places are used for sightseeing, and this is limited to people who are personally connected to the guide involved in the tourism industry. The easy entry of youth to the industry was a great success in this area. As local people see it, tourism is an uncertain business. If incidents occur or illness breaks out, tourists may easily stop visiting. For the hosts to secure a livelihood, it is judicious for them to take other jobs than tourism and to maintain different livelihood strategies, including farming and keeping livestock. As for sustainable tourism, residents cannot be optimistic about their involvement in the industry currently. The Mursi are a mobile society, and tourist villages move easily other places during emergencies. However, due to sugarcane plantations, they face difficulties in their mobility and have no choice but to rely on tourism. The Mursi control the livelihoods of the guides in Jinka town and even the Ari's tourism who rely on them in the area. For the sustainable ethnic tourism to continue, it will be essential to respect the choice of the local community, keep their autonomy and gain support and deep understandings of guests, yet little attention has been paid to the design of strategies to encourage the hosts' socio-political situation.

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References

Buckley, Ralf. 2012. Sustainable Tourism: Research and Reality. *Annals of Tourism Research* 39 (2): 528–546.

Central Statistical Agency, Government of Ethiopia. 2007. *Population and Housing Census Atlas of Ethiopia 2007*. URL:http://www.ifpri.org/publication/population- housing-census-atlas-ethiopia-2007, accessed May 2019.

Christie, I., E. Fernandes, H. Messerli, and L. Twining-Ward 2014. *Tourism in Africa: Harnessing Tourism for Growth and Improved Livelihoods.* Washington, DC: World Bank

Cornelissen, Scarlett and Maruyama Junko 2018. Tourism, Capital, and Livelihoods in Africa. *Global-E Series: Tourism and Development in Africa* 11(34). Url:https://www.21global.ucsb.edu/global-e/june-2018/tourism- capital-and-livelihoods-africa, accessed, 30 April 2019.

Goodwin, Harold 2011. *Taking Responsibility for Tourism. Harold Goodwin Oxford:*Goodfellow Publishers Limited.

LaTosky, Shauna 2006. "Reflections on the Lip-plates of Mursi Women as a Source of Stigma and Self-esteem" in *The Perils of Face: Essays on Cultural Contact, Respect and Self-esteem in Southern Ethiopia*, (Ivo Strecker and Jean Lydall Eds.), pp. 371-386. Münster: Litverlag.

LaTosky, Shauna 2014. Framing the Other: when Strangers Meet in the Name of Tourism. *American Anthropologist* 116 (1):182-185.

Mitchell, J. and Ashley, C 2010. *Tourism and Poverty Reduction: Pathways to Prosperity*: London: Earthscan.

Nakamura, Kyoko 2017. Ethnic Tourism as a Strategy for 'Attraction' and 'Aid': A Case Study on the Kenyan 'Maasai' People. *Journal of African Studies* 92:69-81 (in Japanese).

Nobuko, Nishizaki 2019. An Ethiopian Alternative to "Traditional" Ethnic Tourism. *Global-E Series: Tourism and Development in Africa*. 12(34). URL:https://www.21global.ucsb.edu/global-e/january-2019/ethiopian-alternative-traditional-ethnic-tourism, accessed, 30 April 2019.

Saarinen, J. 2009. Conclusion and Critical Issues in Tourism and Sustainability in Southern Africa, in *Sustainable Tourism in Southern Africa: Local Communities and Natural Resources in Transition*, (J. Saarinen, F. Becker, H. Manwa and D. Wilson Eds.), pp. 269–286. Clevedon: Channel view.

Salazar, Nobel B 2012. Community-based Cultural Tourism: Issues, Threats and Opportunities. *Journal of Sustainable Tourism* 20 (1): 9-22

South Omo Zone Tourism and Cultural Office 2013. *Tourism Statistics in South Omo (2004-2013), South Omo Zone Tourism and Cultural Office, Ethiopia.*

Turton, D. 1978. Territorial Organization and Age among the Mursi, in *Age, Generation and Time: Some Features of East African Age Organizations*, (P.T.W. Baxter and U. Almagor Eds.), pp. 95-130. London: Palgrave Macmillan.

Turton, D. 2004. Lip-plates and "the People who Take Photographs": Uneasy Encounters Between Mursi and Tourists in Southern Ethiopia. *Anthropology Today* 20 (3): 3–8.

Urry, John, 1990. *The Tourist Gaze: Leisure and Travel in Contemporary Societies*. New York: Sage.

WTTC 2017. World Travel and Tourism Council. *Travel and Tourism: Economic Impact 2017: Ethiopia*.

8. Conservation of Cultural Heritage and Tourism in Pakistan

Atsushi Noguchi

Abstract

The Islamic Republic of Pakistan has a lot of diverse cultural heritage resources. The two major Harappan sites, Mohenjo Daro and Harappa, are well-known as well as the Gandharan Buddhist remains in the northwest.

Practices of protection and conservation of cultural heritage in Pakistan were established in the early 20th century under the British rule. After the independence, DOAM (the Department of Archaeology and Museum) plays the key role in federal administration sector, while Peshawar University, Quid-e-Azam University and other universities have helped to establish the necessary academic foundation. However, since 2010, after the eighteenth constitutional amendment, situation has drastically changed. It is said that major authority for the protection and conservation of cultural heritage has been moved to the provincial government. However, the interpretation of the amendment is still in under controversy.

Another problem is the decline of tourism due to security conditions. Once the cultural heritage sites and historic monuments were major destinations for foreign tourists. For instance, there were plenty of Japanese tourists in Gandharan sites in 1990s, but only a few in the recent years. Decline of tourism affects the conservation of cultural heritage. Decrease of social presence and importance, especially loss of economic efficiency, induces the public neglect of cultural heritage. Such a tendency causes poor conservation, vandalism, looting and smuggling, or all other type of infringements to the cultural heritage resources. But we have to understand that this is, basically, not motivated by religious ideology, but is related to the general awareness on the material culture, which is not only limited to the case of cultural heritage.

The Pakistani government is looking for the recovery of tourism on cultural heritage sites. Of course, the measures for restoration of security are very important. In the meantime, several other attempts for attracting the foreign tourists are being made. Collaboration between tourism and religion is one of the focal areas. Buddhist delegates from South Korea, Bhutan and Sri Lanka are being invited to visit Taxila Museum and other Gandharan sites for pilgrimage. Delegates are allowed to offer prayers in the sites. Even the golden casket which was discovered at the Dharmarajika Stupa, believed to contain the relics of Buddha and stored in the Taxila Museum is lent to Sri Lanka during the Vesak Festival. Interestingly, the casket is treated as an archaeological material and a museum collection by the Pakistani side, while Sri Lankans treat it as the holy, religious relic. For this relic, the custodian from the Pakistani side is a museum curator and his Sri Lankan counterpart is a Buddhist monk. Allowance and perception of tolerant and fluid treatment of the artefact seems to be key for cooperation between different religions and cultures. This may be one possible means for further development of religious tourism on cultural heritage.

The other important progress is the development of non-governmental or non-profit sectors. Besides the activities of both federal and provincial governments, the role of NGO/NPO sectors increases year by year. The character of private activity of NGO/NPO sectors is closely connected to the local communities. Conservation works are seamlessly conjoined with social awareness on the importance of cultural heritage. The source of NGO/NPO's activity is mainly private sponsors and donation programs of the religious organizations. Therefore, NGO/ NPO are eager to promote their activity among the public. Then such promotion itself becomes a good attempt of dissemination of cultural heritage for public awareness. The rise and rapid growth of NGO/NPO sector depict another potential of future development on conservation of cultural heritage in relation to tourism.

Keywords : Cultural Tourism, Heritage Tourism, Conservation, Paksitan.

9. Conservation through Management: A Case Study at World Heritage Site of Bhimbetka

S.B. Ota

Abstract

It is not always that sites and monuments are preserved only through an intervention treatment.They can also be preserved through appropriate management plan put in place specific to a particular site and its environment.One such initiative experimented was attempted at Bhimbetka in Madhya Pradesh, which is the only pre-historic site inscribed as a world heritage site in India.It is known for its largest complex of painted rock-shelters that signify its outstanding universal value (OUV) and the site has had long interactions between people and the surrounding landscape since deep human history and emphasises on its continuity till present day.With a view to safeguard the OUV, it becomes a challenge to the conservators to preserve the multifarious nature of this property that includes natural heritage, archaeological heritage and both tangible and intangible living heritage that exist within a systemic structure.

The present paper, in fact, attempts to enumerate the preservation initiatives that have been taken up at this site including certain suggestive measures as a part of a management strategy after identifying the risk factors that threaten the site.The initiatives that have been taken up at Bhimbetka include forest fair, inflow of tourists and vehicles, conserving the soil erosion of the cultural debris, sectorisation of visitors' management, human vandalism, cattle grazing, wood cutting in the forest, forest fire, effects of sunlight and temperature on paintings, effects of deforestation, and both tangible and intangible heritage of the communities who inhabit the buffer zone, and they have been discussed in the present paper.Finally, a strong view has been taken on certain problems that have arisen due to definite provisions made in the Indian Forest Acts, which have threatened the fragile intangible heritage of the local communities.

Keywords: Bhimbetka, Heritage Management; World Heritage Sites

Introduction

It is generally believed that conservation is an integral part of preservation process of archaeological heritage and in each of the conservation initiative, there is some degree of direct intervention intothe archaeological heritage proper. Of course, the preventive conservation as we understand is the mitigation of deterioration and damage to cultural property through the formulation and implementation of policies and procedures as appropriate for the environmental conditions, handling and maintenance procedures and integrated management plan. Preventive conservation is an ongoing process that continues throughout the life of cultural property and does not end with an interventiontreatment. Usually the preventive conservation is done for the conservation of certain archaeological objects. As far asthe conservation of any archaeological monument or site is concerned, it is felt that limited intervention is required for preservation.The composition of archaeological monuments and sites is very complex and these sites are very sensitive to the surrounding environment.Environment and archaeological heritage are inseparable. Any unwanted intervention to the surrounding environment of an archaeological heritage does affect the archaeological monument or the site as well. Besides, there is the intangible facade of tangible archaeological heritage. If we want to preserve the archaeological heritage with all its dimensions, then it has to be done through asite-specific comprehensive and appropriate management plan. With this understanding,certain initiatives (Ota 2005 and 2006) have been taken for the conservation of the world heritage property at Bhimbetka throughacomprehensive management plan as a process. It is needless to mention here that some actions were taken earlier and suggestions have been made (Agrawal 1994; Bednarik 1994a and Pande 1999) as a part of management of Bhimbetka before the current initiatives, whichare discussed below.

The Site and Its Surrounding

Featuring a long history of human occupation, painted rock-shelters at Bhimbetka are located about 45 kilometre southeast of Bhopal on the Bhopal–Nagpur national highway No.69in Goharganj tehsil of Raisen district in Madhya Pradesh. From national highway, one has to travel through a motorable *pakka* road for about three kilometre from

the tribal village of Bhiyanpur. The protected area of Bhimbetka falls within the Ratapani Wildlife Sanctuary. Being part of the sanctuary, it is rich in biodiversity. Bhimbetka and its adjoining hills form an important watershed. Besides this natural setting, the natural architecture of the caves and rock-shelters and the paintings are so wonderful that they attractvisitors in large numbers. In fact, it is this wonder of natural architecture that attracted V.S. Wakankar, the explorer of the site, way back in 1957. The series of rock-shelters were visible as a fort from a distance and that is what fascinated Wakankar to go to the site and locate this largest painted rock-shelter complex in India.

The Area

The designated core zoneof Bhimbetka extends nearly 10 km east–west and 2 km north–south, thus covering a core area of about 1892 hectare, whichforms part of the Vindhyan range in Central India, within the periphery of the Ratapani Wildlife Sanctuary. It is buffered all around by protected and reserve forests, including fertile agricultural land and tribal villages towards its west and east. On its north lies revenue land. These comprise the buffer zone of 10,280 hectares (ASI 2003a and 2003b). The areas of 1892 hectare in its core primarily comprises five hills, namely, the Bineka, Bhonrawali, Bhimbetka, Lakha Juar (East) and Lakha Juar (West). It is on these hills that the naturally formed clusters of rock-shelters of sand stone are found, of which more than 500 caves and rock-shelters have paintings distributed in five hills in the core zone.

The Site

There are nearly 1000 small and big rock-shelters of which nearly 500 shelters contain paintings of varying density distributed in five groups in an area of about 1,892 hectare of hilly and forested terrain. Geologically, the Vindhyan range around Bhimbetka presents homoclinal structures forming cuesta scarps along their south-eastern side and trend northeast–southwest. Bhimbetka hill has a maximum height of 619 metre above the mean sea level, and 119 metre from the eastern valley floor. Its eastern and southern slopes are steep, while northern and western slopes are gentle. On the northern side the slope merges with the alluvial plains. A chain of dissected vertical tors rising

sometimes up to 23 metre height can be seen on the hilltop that are eroded remnants of a former continuous rock mass. From a distance, these rocks look like a medieval fort and form the most prominent landmark in the local topography.

Archaeological Heritage

More than 500 rock-shelters that contain paintings of varying density is the largest rock paintings complex in the country with the earliest record of art in India right from Mesolithic period up to almost present day as a testimony of cultural continuity. These paintings depictvariety of themes showcasing contemporary life in different colours, style and techniques (Anand 1975; Mathpal 1984 and 1998; Misra *et al.* 1977; Ota 2008).

Besides the large number of paintings, these shelters are rich in archaeological remains. Archaeological investigations (Alam 2001; Kennedy *et al.* 2002; Misra 1976, 1982, 1989; Wakankar 1975) in this area have revealed the evidence of unbroken human occupation right from Acheulian period till present day.

Natural Heritage

The area is densely forested with dry deciduous type of vegetation with excellent biodiversity (Asthana 2007; Bajpai 2007; Husain *et al.* 2004; Husain and Datt 2005; Upreti *et al.* 2004). Interestingly, the area supports a large variety of medicinal plants. The area, being a part of Ratapani Wildlife Sanctuary, is rich in several animal species.These include tiger, panther, bear, wild boar, hyaena, wolf, fox, jackal, blue bull (*nilgai*), sambar, chital, swamp deer and chinkara langur, porcupine and hare. Besides, many kinds of birds and reptiles are also seen. This area experiences predominantly a dry climate, except during the southwest monsoon.

The valley floor is drained by the *Jamunjhiri nullah* that flows on south-southeast-east of Bhimbetka group III. Though it is a seasonal *nullah*, water remains throughout the year in the form of pools at many places, which offer drinking water to the local cattle and wild animals. Unfortunately, water retention in this *nullah* has been reduced since the 1970s, due to large-scale deforestation.Besides, there are three

perennial springs on the northern side of Bhimbetka group III that are locally named as the Ban Ganga, Gupt Ganga and Pandapur.

The most fascinating aspect of this landscape is the natural architecture that is formed with different eye-catching shapes of rock-shelters created with differential erosion on the vertical tors. It is very interesting to see the different moods of the landscape of the region with the changing season. Alluvial plains of agricultural fields on the northern side become green in early winter with the cultivation of mostly wheat and become golden brown colour of crops before harvest. The most interesting feature of biodiversity in the area is the wild rice that grows in the valley floor, outside where there is a depression. In March the valley floors and outskirts of the hill becomes extremely attractive with the full blooming of flame of the forest (*palas* flowers).

Living Culture

Besides the natural heritage with an excellent biodiversity, Bhimbetka's uniqueness lies not only in the concentration of its antiquity and art, and the wealth that it conceals, but that it has not remained frozen in time and space.Elements of this continuity are manifest in the creative expressions that show affinity to great antiquity in the traditional lifestyles of the area integral to Bhimbetka and its surrounding region.

Out of 21 villages in the buffer zone, 15 are tribal-dominated villages and 6 are non-tribal villages. The tribal population mostly comprises *Daroi* and *Ojha* both sub-groups of *Gond, Korku, Bhilala* and *Bhil.* The non-tribal population comprise *Nagara* (agriculturists), *Nanda Vamshi* (pastoralist), *Bhoi/Majhi*, *Malvia*, *Pal*, *Thakur* and *Brahman* (Basa and Pandey 2004). The economy depends mostly on agriculture, animal husbandry and partially on forest produce. Due to certain restrictions on the exploitation of forest products, the communities are slowly getting diverted to other works such as brick factory, daily labourand sellingof fire wood. The art and craft traditions prevalent among the communities include mud-relief made on the walls and granaries, wall and floor painting and wood carving. In spite of rapid transformations, many of the communities still continue their

traditions side by side that are visible in their ritual customs, fairs and festivals performed round the year (Pandey 2013 and Basa *et al.* 2006).

Bhimbetka as World Heritage

Bhimbetka was first identified as a national heritage way back in 1989 when it got protected under the provisions of AMASR Act 1958. Subsequently the importance was of this site was realised and initiatives were taken to inscribe it in world heritage list. It was finally on 5 July 2003 that this site got inscribed as World Heritage site under the category of cultural landscape. It is the solitary example of a pre-historic site that has been inscribed as world heritage under the category of cultural landscape in the subcontinent (ASI 2003a and 2003b).

Bhimbetka fulfils two of the six criteria under outstanding universal value identified by UNESCO for world heritage:

"(iii) Bhimbetka reflects a long interaction between people and the landscape, as demonstrated in the quantity and quality of its rock art.

(v) Bhimbetka is closely associated with a hunting and gathering economy as demonstrated in the rock art and in the relicts of this tradition in the local *adivasi* villages on the periphery of this site."

The inscription of Bhimbetka was proposed as a cultural landscape as this natural landscape has provided invaluable evidence of containing and sustaining in a specific zone a sequential, undisturbed evolution of human kind from Palaeolithic to historical period. A wealth of information lies concealed at this site and its context. On the visible surface, the rich profusion of paintings within the rock-shelters is part of an artistic creation and creative expressions of human kind through several cultural layers. This cultural evolution has been nurtured in an undisturbed environment. While contents of the shelters have revealed continuity, it is observed that elements of this continuity, particularly the creative and symbolic aspects find expression in the traditional lifestyles of the surrounding *adivasi* settlements. Bhimbetka is a microcosm that encapsulates this totality. And it is through this totality that this enigmatic site must be viewed.

Range of Risks

The designation of a site asworldheritage site implies changes. Increased number of visitors, demand for new facilities, varieties of developmental works in the surrounding area and other aspects affect the site with its landscape and setting to a large extent.Therefore, proper management of such sites with their landscape and environment becomes imperative to preserve the cultural values and authenticity of the site.

Bhimbetka as the cradle for archaeological heritage, natural heritage, living heritage and, of course, intangible heritage make it a complex that needs to be understood in proper perspective and conserved in its totality. Further when the outstanding universal value of Bhimbetka as recognised by UNESCO is considered, it becomes mandatory on the part of site managers to consider Bhimbetka with all its dimensions for preservation. Before going to address various conservation and management issues, it is essential to identify various risks, its nature, cause and intensity and finally its impact on both tangible and intangible heritage at Bhimbetka.

Bhimbetka is the only rock art site in the country where attempts have been made to understand the complexities of conservation and management of the site from different perspectives. Following its declaration as a world heritage site, a number of management initiatives were taken up (Ota 2005) according to the provisions made in the provisional management proposal, which was prepared as part of the nomination dossier document sent to UNESCO. Besides, a number of other studies were also carried out with a view to have a better understanding of the problems and complexities for an effective management of the site in future, andthey were discussed in the International Rock Art Congress held at Agra. Enumerated below are some of the experiments that were carried out while managing the rock art site at Bhimbetka and some of the suggestions have been given as part of the management process of the site.

The various risks related to conservation and management issues identified at Bhimbetka are broadly grouped into two categories: natural and human-made. Except the natural decay due to weathering

of the rock-shelters, most other risks are human-made that include traditional fair, forest fire, human vandalism, cattle grazing and wood cutting.

Traditional Fair

The buffer-zone of Bhimbetka core area is occupied by various ethnic communities that have preserved rich traditional practices. One such interesting traditional practice is the annual fair that is held every year on the occasion of *Ram Navmi* near the Bhimbetka group III of painted shelters inside the core zone. Besides the importance of this traditional festival being an intangible heritage of the area, its adverse impact if any on the forest cannot be ignored. Therefore, it was realised that understanding the nature of this fair would help in finding out its adverse impact, if any, on the fragile ecosystem and tangible cultural heritage of the area, so that one could also find out a better solution to mitigate these risks by approaching this traditional fair in a positive way.

A detailed study was carried out on this traditional fair in 2004 (Ota *et al.* 2004), which established the fact that a large volume of non-degradable garbage gets disposed into the forest area every year during this festival. This garbage also infects wildlife adversely in various ways. Besides, there is a tremendous amount of uncontrolled vandalism taking place during the fair that affects not only the fragile natural heritage, but also the precious pre-historic paintings. This study was designed to carry out the following aspects of this traditional festival that include (i) identification of various routes through which villagers from the surrounding area come and congregate at the fair ground, (ii) identification of villages from where people come to the fair, (iii) visitors inflow pattern in different routes, (iv) vehicle inflow pattern, (v) mapping of fair area and garbage spread and (vi) garbage composition analysis. The detailed analysis of the garbage produced during the festival shows that a lot of non-biodegradable garbage such as polythene, plastic and glass objects get into the forest every year. This problem needs to be addressed seriously as part of management policy for the area. Since this is the only occasion when there is the largest congregation of local people, a method can be evolved to educate and

make people aware about the importance of their heritage and make them feel to become a part of the heritage conservation movement being a stakeholder. It is also a fact that in spite of certain problems, this festival needs to be continued as part of intangible heritage tradition.

The traditional annual fair, on the other hand, though held for a day, is invariably visited by all the persons of nearby villages of the buffer zone of Bhimbetka. Moreover, these local people spend for more than four hours in this fair, participating in various activities.This is in stark contrast to the programmes organised by governmental agencies wherein people do not come in numbers that are significant, nor do they go around the exhibits for more than 10 minute. Thus, the publicity endeavours organised through dedicated events for the preservation of heritage were not getting the desired result. Herein it is suggested that considering the ever-increasing threat to Bhimbetka due to a variety of population pressures, there is a great need to popularise the need for protecting this heritage as a pride of the local people, rather than they looking at the site as place for natural resources only. This can be achieved by intensive campaign on this congregation of local communities during the festival.

Nature of Fair

This forest fair is held on the day of *Ram Navmi* every year.It starts in the afternoon and continues forfive to six hours. It is attended mostly by the villagers who residewithin the buffer zone of Bhimbetka. Besides the *pakka* (metaled) road that leads to Bhimbetka complex; people from different nearby villages come to this place through different forest routes (pathways). Besides the sizable gathering of people from nearby villages; interestingly people also use a large number of both motorbikes and four-wheelers including tractors to come during the fair. In this fair, the types of shops include mostly those of eatables that are cooked at the fair, and shops selling other household items including toys, bangles and other objects. Besides, one finds a number of shops selling flowers and other items for worship in the nearby temple, located in one of the shelters. The garbage produced during this fair is huge, and it includes both bio-degradable and non-biodegradable types.

Besides, so many people gather from different villages that it becomes difficult to control human vandalism of the archaeological heritage.

Garbage Analysis

The importance of study of garbage was first realised in sociology and archaeology following the Tucson Garbage Project initiated by Dr. William Rathje in 1973. This in fact gave rise to an independent discipline called 'garbology' (Wikipedia 2019). With this concept in mind, it was thought that the garbage produced due to this fair is required to be studied to understand its composition. In turn, it would help in understanding the nature and composition of the garbage that is produced and accordingly a decision can be taken to reduce the induction of non-biodegradable garbage into the forest.

It was on 30 March 2004 when the fair was held on the day of *Ram Navami* that a strategy was developed to document the various aspects of the fair in detail. The garbage that was produced then were collected and analysed (Table 1) in conjunction with the type of shopping activities that took place during the fair. It demonstrated for the first time that considerable amount of non-biodegradable garbage such as plastic and glass bangles gets into the forest every year during this fair. But it was certainly not very alarming then. After understanding the nature of garbage, it was then decided that the garbage needs to be lifted out from the forest. Accordingly, since then after every fair, the garbage was collected and removed from the reserved forest.

Looking at the increase in the number of shops and activities during the fair in the subsequent years, it was in 2010 that we when decided to restudy the garbage compositions besides other parameters employed for understanding the fair. The results of the garbage analysis that came out in 2010 (Table 1) was, infact, frightening. The volume of plastic products had gone up nearly four times compared to 2004.Out of this plastic garbage, plastic bottles (mostly drinking water bottles), drinking water, polythene packets and *gutka* packets were really worrying. Besides, polythene bags were part of the garbage. It was then decided that unless some concrete initiatives were taken, this garbage cannot be controlled in future and would destroy the original fabric of the fragile ecosystem of the sanctuary.

As a follow-up action, initiatives were taken in the following directions. It was felt that it was necessary to have a dialogue with the local *mela* (festival) organisers in the first instance. The administration (of ASI) took the fair committee into confidence and explained the shortcomings of this garbage getting into the forest before the fair is held. Besides, it was realised that if free water is provided to the villagers coming to the fair, the sales of drinking water packets would be reduced. In fact, this message was conveyed to the *mela* authorities beforehand, and as a result, it was then realised that selling drinking water packets would notbe profitable. This massage, in fact, worked successfully and its impact got reflected in the garbage analysis of 2011 (Table 1). Besides, there was the systematic publicity undertaken among the villagers during the fair through banners and through interacting with the people visiting the fair to avoid using polythene. In fact, it was realised that *mela* is the best forum to educate the people about the heritage, nature and other related matters and accordingly outreach public awareness programme on archaeological heritage through personal interaction was planned.

It was also noticed that a lot of polythene packets are used by the devotees buying coconut, flowers and other materials for carrying worshipping materials to the temple, which leads to the creation of a lot of non-biodegradable garbage. Therefore, the shop keepers were convinced to use plastic baskets in place of polythene packets, which are profitable for them and it also reduces the volume of garbage.

Another interesting step that was taken was on *gutka* packets.In 2011, a Supreme Court judgement banned the use of plastic packets for *gutka*. Taking advantage of this judgement, the matter was discussed with the *mela* committee before the fair. The outcome was so positive that the selling of *gutka* got drastically reduced during the subsequent years. The last garbage analysis that was done in 2012 (Table 1) clearly established the fact that the positive steps that were taken remained successful. Besides, the fair that was having an adverse impact on natural and archaeological heritage earlier had become a medium to educate the local people who are the real stakeholders to preserve our heritage for posterity. Further, it is suggested that such studies need to

be undertaken periodically to understand the impact of this forest fair. After all, the forest fair forms a part of the intangible heritage of the area.

Table 1. Data of Garbage collected from Bhimbetka

Sl. No.	Nature of Garbage	2004	2010	2011	2012
01	Plastic	3609 g	Plastic cups-1,000 g	250 g	650 g
			Ice cream plastic cups-350 g	300 g	
			Plastic bottles-750 g	000 g	000 g
			Polythene packets (drinking water)-4,800g	2,250 g	450 g
			Polythene bags- 4,600 g	4,000 g	3,350 g
			Wafer packets- 1050 g	100 g	
			Gutka packets- 1600 g	400 g	100 g
				Plastic spoon-300 g	150 g
				Plastic wrappers-300 g (Ice cream)	
02	Glass bangle pieces	1629 g	1250 g	1,200 g	750 g
03	Earthen Objects	1116 g	----------	---------	

04	Bio-degradable	Paper-7701 g	Paper packets-15,150 g Newspaper pieces-11,350 g	9,150 g 7,100 g	9,000 g 6,800 g
		Ice cream sticks-622 g (wood)	Ice cream sticks- 3,300 g (wood) Ice cream packets-6,900 g	1,950 g 2,775 g	1,150 g 1,650 g
		Ash / char-coal-1313 g	----------	--------- Paper cups-2,100 g	--------- --------- Paper plates-1,850 g
05	Garbage from temple	Co-conut shells-1408 g	Mixed type garbage – 7,400 g (10% of total temple garbage)	1,400 g	1,000 g

Environment and Archaeological Heritage and Human Interface

Painted rock-shelters at Bhimbetka cover a huge area within a wildlife sanctuary with variant topography and excellent biodiversity, which in fact is responsible for the preservation of the rock-paintings including the rock-shelters itself. Preservation of archaeological heritage has a direct bearing on the nature of the surrounding natural environment. Any depletion in the quality of environment is bound to adversely affect the archaeological heritage that has been tuned for centuries in that environment. The area has remained a centre of human activity since pre-historic times. Further with the inscription of the site as world heritage site, the tourist inflow has gone up several folds. Increase of human interference in recent years has undoubtedly damaged not only the pristine landscape, but also the vegetation (Radhaballabhi 2004). This in turn has adversely affected not only the rock paintings, but also the buried archaeological remains. Thus, recording and monitoring the environmental and anthropological data is very much essential to understand the nature and degree of damage that is taking place. Some studies have been carried out on various aspects that include tourist and

vehicle inflow pattern, soil erosion and its effect on rock paintings, and the effect of temperature and sunlight on paintings. Further, it has been suggested to monitor such studies periodically to understand the pattern of deterioration of both environmental and archaeological heritage, so that before it is too late appropriate measures can be taken to save the heritage of Bhimbetka.

Impact of Increased Tourism

It is a fact that excess tourism beyond the carrying capacity of a site creates adverse effects. Moreover, archaeological sites sometimes get affected due to uncontrolled tourism in the form of human vandalism damaging both cultural and natural heritage. Bhimbetka is no exception to it.It is more sensitive as the archaeological heritage at Bhimbetka forms part of natural heritage and *vice versa*. Increase in the number of tourist inflow beyond thecarrying capacity not only gives rise to increase in human vandalism, but also damages both cultural and natural heritage of the area. Presently only the Bhimbetka group III painted shelters is open to the public. It has been noticed that the inflow of tourist has gone up after the site got inscribed asa worldheritage site in 2003. A controlled tourist package can only help in saving the site for the future. For understanding the complications involved in the increased number of tourists, one has to understand the tourist inflow pattern minutely. Let us examine the tourist inflow pattern in 2003 when Bhimbetka got inscribed as a world heritage site.

The month-wise distribution pattern of the tourists shows that the main tourist season at Bhimbetka is from July to February and with July and December being the peak months.When the daily inflow of tourist is analysed, the pattern showsthat amaximum number of tourists visit Bhimbetka on Sundays. For movement of the tourists in Bhimbetka area, a paved pathway has been provided that guides the tourists to various painted shelters that are presently open to the public. Considering this paved pathway for the movement of tourists in the area, an exercise was undertaken to find out the existing carrying capacity for the movement of tourists. The total paved pathway area accounts for 1760 squaremetre. When the inflow of tourists was studied, it was found that the peak day of the peak season was 20 July 2003 when a

total number of 1065 tourists visited Bhimbetka. Further the analysis of the detailed data suggests that the peak hours on that day was between 10.00 and 12.00 hrs when 288 tourists visited the site. When the number of tourists during this peak hour was calculated against the available paved pathway space, it was found that per unit area of 6.11 square meter was available. Though this problem is not alarming today, there is a signal that very soon the problem of visitors' congestion would arise within the available space at Bhimbetka.Likewise, for parking of each four-wheeler vehicle, the space that was available then to the tune of 24 square meters was also quite normal. Therefore, such baseline data need to be generated and analysed periodically, so as to understand the impact of tourists both on archaeological and natural heritage, and the problem can be addressed on time in future.

As regards denudation of the forest and soil erosion at Bhimbetka is concerned, its effect on rock-shelters and paintings is just disturbing. In fact, almost more than 99% of the visitors visit Bhimbetka group III only. Because of constant movement of tourists in the rock-shelters area, there is tremendous degree of soil erosion exposing the lithic artefacts from the cultural debris at the bottom of the shelters. With a view to address this problem, several initiatives have been taken from time to time in the past when erosional surface was covered with additional sediment from outside and sometimes the surface was covered with geo-textile with sediment on the top. All these initiatives have remained futile and they had adverse impact on the paintings. The additional sediment that was spread on to the surface created lot of dust that covered the surface of the paintings. Finally, the well-accepted precautions that have been taken in many other countries (Bednarik 1994b) were finally adopted by covering the original cultural debris with wooden planks as the remedial measure.

Sectorisation of Visitor Movement

The forest was being constantly exploited by the local people for wood for last several decades before the site got protected as a monument of national importance, which hadresulted in a tremendous loss of vegetation in the Bhimbetka area. The rock-shelters are located on the hilltop where the sediment cover is extremely limited. This is

the area where growth of the trees is very slow due to a thin deposit of the sediment. Any destruction to this forest on the hilltop takes several decades for the trees to grow tall again. Because of loss of density of vegetation in the forest, it has resulted in soil-stripping, exposing the buried lithic artefacts, increase in temperature resulting in exfoliation of the rock-shelters and direct falling of sunlight on the rock paintings that affects the mineral pigments adversely.

Bhimbetka group III of rock-shelters alone attracts more than 99% of the total inflow of tourists to Bhimbetka area. This phenomenon has resulted in two outcomes: First, there is the feeling of monotony among the visitors who happen to come to Bhimbetka more than once. Second, due to continuous movement of people in the same area of the site throughout the year, the flora in the precincts that has already been denudated is not able to generate itself. As a result, one can see the depletion in forest cover on the Bhimbetka group of hills than the other hills at Bhimbetka. Therefore,sectorisation is the only alternative for the visitors by opening up different sectors in the area as a planned strategy for optimum visitor satisfaction without endangering the regeneration of flora of the area (Muhammed and Ota 2004).

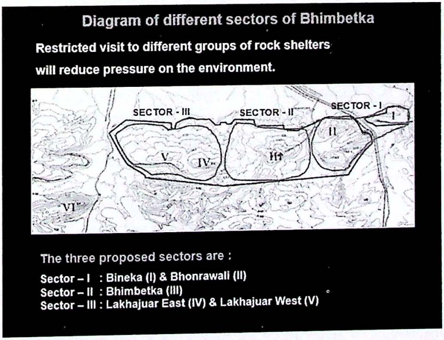

Fig. 1. Diagram of different sectors of Bhimbetka, Source : author.

It is suggested that one of these three sectors (Fig.1) of Bhimbetka will be opened at a time for a period of four months and then the other sector will be opened to the public. As a result, periodical rest can be given to the sensitive forest cover to grow. Moreover, monotony of the visitors in visiting only one group of shelters, i.e. Bhimbetka group again and again by the domestic visitors could be removed by allowing the visitors to visit the other groups. Only interested people and scholars can have the entry access to other sectors for a special fee.

SectorI : Bineka (I) and Bhonrawali (II)

SectorII : Bhimbetka (III)

SectorIII : Lakhajuar East (IV) and Lakhajuar West (V)

This measure would in fact reduce pressure on the natural environment and at the same time it would attract more tourists as there would be the break in monotony of visiting only one group, i.e. Bhimbetka group III, of painted rock-shelters. The expected benefits of this visitor management system are multi fold. This would not only give a rest or a breathing period to the forest to regenerate, but also in turn would help in conserving the ecosystem of the area. Further, one can have a better control over the visitors and also would break monotony among the visitors to visit only one group of rock-shelters every time.

Effect of Sunlight and Temperature

It is a known fact that sunlight and temperature have direct impact on the preservation of paintings as well as the rock surface. The partial denudation of forest that has taken place in last couple of decades aroundthe shelters of Bhimbetka group III before its protection due to constant trip of visitors and overexploitation of wood has resulted in the replacement of old huge trees with stunted growth of young trees. As a result, rock paintings at a few places are exposed to direct sunlight in this group of shelters. The direct sunlight over the paintings, in fact, affects the age-old pigments in damaging particularly organic binder (if any) added to the painting pigment (Ravindran *et al.* 2012). The other impact of direct sunlight on paintings is the thermal fracture due to differential temperature on the rock surface and its ambience. This in fact leads to chipping of the rocks at the place where the paintings

are made. In fact, such areas are prone to faster weathering process in comparison to the portions where there is no direct sunlight.

Keeping this in mind a short study on the impact of direct sunlight and temperature on the painted surface, i.e. rock surface including the painting, was carried out so that one can find out the solution to preserve such paintings wherever exposed. Citing one of the examples is the study that was carried out on shelter no.15 in Bhimbetka group III. Considering the correlation factor between direct sunlight and temperature on paintings, a method was developed to study this aspect.Constant monitoring of the data on day-to-day basis was carried out both for sunlight and temperature for a period of one year in 2003–04. The falling of direct sunlight on paintings and its intensity was observed every day and timings were recorded. Besides, to corroborate the observed intensity of sunlight on paintings, it was also recorded with photography. Likewise, temperature both on the rock surface on which paintings are depicted and the ambient temperature at that spot were also recorded on an hourly basis every day for a period of one year. Finally, the enormous data that was collected was analysed for the day when the sunlight falls on the paintings and remains for a longer period in this rock-shelter.

Two dates, i.e. 26 May 2003 and 7 February 2004, were selected for a detailed analysis when direct sunlight remained on the painted surface for a longer duration. It was found that during this period direct sunlight almost covered the entire painting during its peak time and the total duration when direct sunlight remains on the paintings is about two hours. This, in fact, isa serious concern and in future it is required to be addressed.

Likewise, the hottest day of the year was 1 June 2003 (Fig. 2) for which the temperature data was considered for analysis. When the hourly temperature data both on the painted surface and ambient air temperature was analysed, it was found that after 1630 hrs in the afternoon, there was the contrast in both the temperatures. The increase of temperature almost remained in same pace from 08.30 to 16.30 hrs. But suddenly there was a drop in ambient temperature from 16.30 hrs onwards, whereas in contrast, the painted surface temperature, i.e.

rock surface on which paintings are depicted, increased. This drastic differential temperature is responsible for thermal fractures of the rock surface, affecting the painting surface as has been noticed at many places.

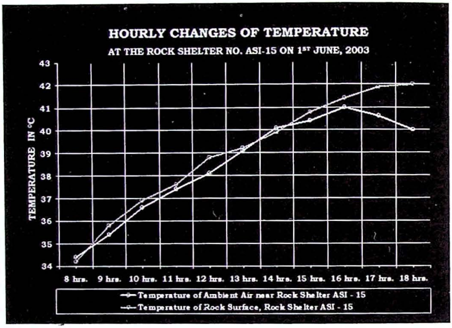

Fig. 2. Hourly changes of Temperature, Source : author.

Now the question was how this differential temperature of both ambient and surface can be reduced. Of course,large-scale deforestation or denudation of forest is the main cause for rise in temperature. Therefore, good vegetation cover is the only solution that in fact keeps cool both the rock surface and ambient temperature. It is therefore essential to create a base data on the density and growth pattern of vegetation in front of the painted rock-shelters where the problem of direct sunlight on paintings and rapid fluctuation of temperature can be addressed. Due to thin sediment cover on the hill top, the growth of vegetation is very slow. Therefore, it has been suggested to plant *Dendro Clamus-Striptus* (bamboo), which is a local species, in front of such shelters as a screen till the rest of the trees of various types are grown to a considerable height to act as a screen in front of the painted rock-shelters to protect them from direct sunlight and differential temperature.

Besides all the initiatives described above, multidisciplinary geo-scientific investigations have been carried out by the Geological Survey of India and a baseline data on certain defined abiotic parameters have been generated along with geotechnical properties of the rock mass and also the preparation of various thematic maps on topography, geomorphology and geology (Sinha *et al.* 2004). This would help in understanding and monitoring the landscape and environment of the area so that a precautionary measure can be taken up at an appropriate time when required.

Cattle Grazing

Cattle grazing is one of the major issues that in fact is responsible substantially for the deterioration of the forest environment. To understand its adverse impact on the forest, it is essential to realise the complexities of forest dependence. Most of the communities in the buffer zone have the cattle for their own use, which is extremely limited. For them forest is the only pasture land with water bodies available. Therefore, grazing of cattle of the villagers from buffer zone in the forest area of Bhimbetka would not impact the forest environment to a great extent.

But the real scenario of cattle grazing in the area of forest dependence is different and may be rightly termed as 'overexploitation of forest' (Radhaballabhi 2004). It has been observed that people from outside the buffer zone like Obedullaganj and other villages from where large numbers of cattle are sent for grazing in the Bhimbetka forest through the local communities who reside in the buffer zone. This activity continues almost throughout the year. It has been noticed that due to overexploitation of the forest through cattle grazing has tremendous adverse impact on the forest ecosystem. The valley floor that is regularly in use over a time for cattle grazing has become completely barren. Besides, the beautiful springs that exist right from the pre-historic times and still support the nearby villagers are slowly getting spoiled by large-scale cattle grazing.

It is argued here that cattle grazing from nearby villagers is limited andis not responsible for the deterioration of the forest environment by any means. Such activities by the villagers are considered as a cultural

continuity as such scenes are depicted in rock paintings of Bhimbetka. It is only overgrazing of cattle, which is a later introduction in the area, that is harmful to the forest for which the outside people are solely responsible.

It is therefore strongly suggested that cattle grazing as part of forest dependence needs to be continued only for the cattle that belongs to the villagers of the buffer zone. But overexploitation of forest through animal grazing needs to be stopped by banning such outside and illegal involvementof people through the support of local inhabitants.

The Intangible Heritage

The intangible cultural heritage, as defined by UNESCO, means the practices, representations and expressions as well as the associated knowledge and the necessary skills, those communities, groups and, in some cases, individuals recognise as part of their cultural heritage. The intangible cultural heritage, while being transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their historical conditions of existence; the intangible cultural heritage provides people and groups of people with a sense of identity and continuity.

Keeping in view the definition of intangible heritage and considering Bhimbetka as an example of cultural continuity from the pre-historic times to the ethnographic present, the following are some of the examples of intangible heritage components of the area (Ota 2004 and 2006) that need to be preserved for posterity if one wants to understand the past human behaviour.

Traditional Knowledge of Forest Acquaintance and Resources

For generations, the villagers from forest villages, who are dependent on the forest resources for their sustenance almost year-round, have accumulated excellent knowledge about the plant foods available in the area, their seasonal variability and location, in addition to knowledge of a large variety of medicinal plants. Besides, particularly the *Gonds* and *Korkus* communities possess a very good knowledge of locational availability and differential occurrence of

plant foods in the area.The interesting aspect among these communities is the identification and knowledge about the exact place of their availability in the forest in spite of the fact that some of the plants are very small and rare. Further, the locations of availability of some of the roots and tubers, even after the creeper is dead, are known to them. It has even been noticed sometimes that some of the useful plant(s) that are extremely rare with a frequency of hardly one or two plants inside the dense forest are identified and their exact location is remembered. Moreover, the traditional way of taxonomic classification of various plants and vocabulary used for it is very interesting.

Traditional Knowledge of the Landscape

The landscape configuration of the area is unique.Standing over the hill of Bhimbetka is a series of tall and massive rocks running in a straight line. In geological times these rocks formed a single block, and caves and shelters have been formed on the hill tops as residual rock masses through the natural decay of soft sandstone rock due to the action of sun, rain and wind over millions of years. From a distance these rocks form a landmark with a prominent feature in the local landscape for many kilometre and look like medieval fortifications. In fact, the natural architecture of massive residual rock masses is unique to the area. The configuration of the landscape, the natural rock in different forms, the stream on the valley floor, huge rock boulders, caves, shelters, exposed bedrock and springs form landmarks. In fact, the natural architecture of the massive residual rock masses is unique.

The understanding of this interesting landscape configuration and the traditional knowledge thereon is a unique intangible cultural heritage of its own. The natives whose economy is based on forest and its produce spend most of their time in the forest. In fact, a variety of activities are performed in the forest such as plant-food gathering, small game hunting, honey collection, collection of fuel wood and medicinal plants, use of water bodies and taking cattle for grazing. For efficient utilisation of forest and forest resources, knowledge of the landscape becomes imperative.

Different locales are used by different people for different purposes. These have been given meaningful names and remain

associated with daily life. Based on these, a unique vocabulary has developed among the natives for identifying, recognizing and conveying the knowledge of the landscape. Many of the painted rock shelters, unusually shaped shelters and landscape configurations are named and there are also myths attached to them by the natives. This traditional knowledge held by the communities helps in understanding the cognitive aspect of these people in particular and the man-land relationship in general. Further legends and myths associated with various spots across the landscape help us understand the use of space in the past and the process by which the knowledge is transmitted and continues as part of cultural continuity for generations (Ota 2006: 150).

Traditional Knowledge of Navigation

Human navigation is considered as the sixth sense (Baker 1981) and is one of the major intangible heritages essential for survival and as such the traditional knowledge about the forest and navigation into this is transmitted to the next generation. 'Through various aspects of navigation and associated legends, one can look back into the history of any community. The traditional way of understanding, recognizing and remembering landmarks for navigation in the natural environment is unique, and this knowledge system deserves to be safeguarded for posterity' (Ota 2006: 150).

It is the knowledge about forest navigation that helps the local community in efficient hunting and gathering. Each of the various unusually shaped rock masses that form landmarks in the forest are named differently. 'The present-day pattern of movement of the natives for various activities in the forest gives clues about the pattern of movement in the past. Movement in the forest requires a particular way of negotiating the complexities of the forest landscape about which the natives of the area are well informed' (Ota 2006: 150).

Present Scenario

'As the area is part of the reserved forest and also the Ratapani Sanctuary, there is forest legislation in place to protect and preserve the forest including the wildlife. Unfortunately, we are so focused on the forest and the wildlife that we have failed to consider the natives as part of the forest' (Ota 2006: 152). Moreover, in all our endeavours to

preserve the natural and archaeological heritage of Bhimbetka, the local inhabitants have never been considered as one of the stakeholders.

The following are the forest- and wildlife-related legislations that have become a hindrance in safeguarding the intangible heritage. In fact, because of these legislations, natives are deprived of their age-old traditional knowledge on their surrounding forests and its environment. And the day is not far when this traditional knowledge will be wiped out forever.

- The Indian Forest Act, 1927 was enacted to consolidate the law relating to forests and the transit of forest produce. It deals specifically with reserved forests, reserved forests that have been assigned to any village or community, and protected forests.
- The Forest (Conservation) Act, 1980 restricts de-reservation of forests or use of forest land for non-forestry purpose.
- The Wildlife (Protection) Act, 1972 prohibits the hunting of scheduled animals and the picking, uprooting, etc. of specific plants and trees.

  Because of the strict implementation of the provisions of these Forest Acts, there is an adverse impact on much of the traditional knowledge related to forest and forest produce, including the forest dependence economy of the natives are fast disappearing contrary to the integrity of Bhimbetka's unique heritage.

1. Power of the government to have claim on pasture and forest produce restricts the cattle keepers from moving into traditional pasture in the forest with their cattle herds. This slowly reduces these people's acquaintance with the forest and affecting their economy right from pre-historic times as depicted on the walls of rock-shelters.
2. Regulations concerning the collection of forest produce, cutting of grass and pasturing of cattle restrict

the usual activities of these people within their forest-based economy. People are only allowed to collect restricted amounts of dry fuel wood and some plant foods. The use of building materials from the forest and large-scale dependency on plant food from the forest are banned. This has adversely affected the traditional knowledge on forest and its environment.

3. A prohibition on picking and uprooting of specific plants has affected to a great extent the age-old traditional knowledge system on medicinal plants, its process and application.

It was thought previously that other 'social'forestry area could be created and opened to these communities to continue their day-to-day activities i.e. cattle grazing, fuel wood collection and some plant food collection etc. But this would not meet the entire requirement of the communities which fully or partially depend on the forest for their survival. Besides the intangible knowledge system associated with the original area could not be safeguarded because original landscape cannot be recreated in another place. By so doing the traditional knowledge about the use of space in a particular forest landscape of which the archaeological heritage is a part will be forgotten. The creation of other 'social' forestry areas would not only speed up the disappearance of the various branches of traditional knowledge related to the forest and the forest landscape of these natives, but also fast acculturation would take place in changing the lifestyle of these people. Thereby the very rationale for making it a World Heritage site to safeguard the cultural continuity could not be adhered to (Ota 2006: 152).

Keeping this in view, following suggestions are made for safeguarding the intangible heritage in the form of traditional knowledge of the natives that forms part of our heritage at Bhimbetka.

1. Cattle grazing, though banned by the Forest Act, the natives who are the 'tribal' and other communities residing in the buffer zone should be allowed to take their cattle (which are of very limited number) into the forest for grazing with the caution

not to despoil the water bodies of the forest. The cattle of the villagers staying outside the buffer zone should be banned. This would certainly reduce the inflow of cattle into the forest, thereby reducing the pressure on the forest environment.

2. As regards the collection of wild plant food as a part of forest dependence of the tribal communities of the buffer zone is concerned, it should be allowed, but certainly not by the people from outside who exploit the forest produce for commercial purposes. This in fact reduces the pressure enormously. The requirements of forest produce of the native population for their livelihood is extremely limited and the capacity of the forest can support them.

3. The real need for medicinal plants for the use by the tribal population of the buffer zone is small and their collection of such plants from the forest for their personal use is not going to affect the density of these rare plants. To revive the traditional knowledge on medicinal plants and its process including application, the village medicine persons from the buffer zone should be allowed to continue with medicinal practices for their people. Only the commercial use of medicinal plants by outside people should be stopped.

4. Festivals, fairs and worshipping of deities that form part of the intangible heritage of the native population are not in fact technically allowed inside the protected area of the forest as per the Forest and Wildlife Acts, but there is a complete relaxation of the rules for some such activities in the forest. In fact, some of these activities like sacred precinct and sacred groves of the tribal communities inside the forest helps in preserving the original fabric of the forest.Interestingly such activities are permitted out of consideration for the role these communities play in joint forest management as part of forest-saving activity (Ota 2006: 154).

5. One of the interesting aspects of the Bhimbetka forest is the wild rice that is found to grow as part of biodiversity. This must have been exploited even during the past by the prehistoric human communities of the area. Unfortunately, human interference in recent years modifying the landscape has affected this unique landscape to certain extent and this unique biodiversity is fast disappearing. The traditional knowledge of collection, processing and symbolic value associated with wild rice is interesting. Considering the biodiversity of the area and the interesting traditional knowledge associated with wild rice, it is strongly suggested that the natural pools that hold potential for the growth of wild rice occur in pockets in the area need to be preserved. Further, it should be ensured that there is no outside exploitation of this wild rice from this area.

'Tangible heritage is justified only when it is seen and preserved in conjunction with its associated intangible heritage'. This will be possible only when the owners of the intangible heritage are considered to be the prime stakeholders in the decision-making process to preserve our heritage. It would not be out of place to mention here that, the right to preserve the cultural identity and traditions, and to pursue their own cultural development within their environment lie with the communities and its members who arethe local inhabitants of the area (Ota 2006: 156). To put it in different words, both intangible and tangible including the natural heritage can be preserved in its context as long the interest and involvement of the natives of the area are safeguarded including their interdependence with the forest. Contrary to this are the legal issues at various levels including the various Forest Acts as described earlier. However, it is suggested that an appropriate long-term comprehensive planning as a part of conservation strategy needs to be developed with a legal backing so that the existing archaeological, natural and living heritage including intangible heritage of the area is secured.

References

Agrawal, R.C. 1994. An Approach for the Conservation of Bhimbetka. *Purakala* 5 (1-2): 25–30.

Alam, Md. Shafiqul 2001. *Palaeolithic Industries of Bhimbetka, Central India: A Morphometric Study*. Dhaka: Bangla Academy.

Anand, Mulk Raj 1975. Bhimbetka. *Marg* 28 (4): 4–16.

Archaeological Survey of India (ASI) 2003a. *Rock Shelters of Bhimbetka: Continuity Through Antiquity, Art and Environment – A Proposal for Nomination for Inclusion in the World Heritage List.* New Delhi: Archaeological survey of India.

Archaeological Survey of India (ASI) 2003b. *Rock Shelters of Bhimbetka: Continuity Through Antiquity, Art and Environment – Management.* New Delhi: Archaeological survey of India.

Asthana, Anuradha 2007. *Floristic Diversity and Ecological Studies of Bhimbetka World Heritage Zone.* (Unpublished Ph.D. Thesis). Lucknow: University of Lucknow.

Bajpai, Aahuti 2007. *Taxonomic and Ecological Studies on Lichens of Bhimbetka, World Heritage Zone, Raisen District, Madhya Pradesh*. (Unpublished Ph.D. Thesis). Lucknow: University of Lucknow.

Basa, K.K. and S.K. Pandey 2004. Anthropological Survey of the Buffer Area around Bhimbetka: A Demographic Profile. Paper presented in *the RASI-2004 International Rock art Congress* held at Agra.

Basa, K.K. S.K. Pandey, B.K. Mohanta and R.A. Khan 2006. Mortuary Practices of the Daroi Gonds: A Study on their Intangible Cultural Heritage. *Humankind* 2: 59–84.

Bednarik, R.G. 1994a. Some Suggestions for the Management of Bhimbetka. *Purakala* 5 (1–2): 5–24.

Bednarik, R.G. 1994b. Rock Art Conservation in Australia. *Purakala*, 5 (1–2): 31–40.

Husain, T. B. Datt and L.B. Chaudhary 2004. Perspective of Floral Diversity of Bhimbetka World Heritage Site. Paper presented in *the RASI-2004 International Rock art Congress* held at Agra.

Husain, Tariq and Bhaskar Datt 2005. Bhimbetka – A newly declared World Heritage Site. *Current Science* 88 (3): 334.

Kennedy, K.A.R., J.R. Lukacs and V.N. Misra (Eds.) 2002. *The Biological Anthropology of Human Skeletal remains from Bhimbetka, Central India*. Pune: Indian Society for Prehistoric and Quaternary Studies.

Mathpal, Y. 1984. *Prehistoric Rock Paintings of Bhimbetka, Central India*. New Delhi: Abhinav Publications.

Mathpal, Y. 1998. Paintings of the Bhonrawali Hills in Central India: Documentation and Study. *Purakala* 9 (1–2): 5–52.

Misra, V.N. 1976. The Acheulian Industry of Rock Shelter III F-23 at Bhimbetka, Central India: A Preliminary Study. *Puratattva* 8: 13-36.

Misra, V.N. 1982. Evolution of Blade Element in the Stone Industries of the Rock Shelter III F-23, Bhimbetka, in *Indian Archaeology: New Perspective*, (R.K. Sharma, Ed.), pp. 7–13. New Delhi: Agam Kala Prakashan.

Misra, V.N. 1989. Bhimbetka. In *An Encyclopaedia of Indian Archaeology*, Vol.2, (A. Ghosh, Ed.), pp. 69–73. New Delhi: Munshiram Manoharlal.

Misra, V.N. Y. Mathpal and M. Nagar (Eds.) 1977. *Bhimbetka: Prehistoric Man and His Art in Central India*. Pune: Poona University.

Muhammed, K.K. and S.B. Ota 2004. Management of Tourist Traffic by Sectorization at Bhimbetka, District Raisen, Madhya Pradesh. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Ota, S.B. 2004. Tangible and Intangible: An Integrated Approach to Heritage Management at Bhimbetka. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Ota, S.B. 2005. Declaration of Painted Rock Shelters of Bhimbetka as World Heritage and its Management Initiatives. *Purakala* 14–15: 83–88.

Ota, S.B. 2006. An Integrated Approach to Heritage Management: A Case Study at Bhimbetka, in *International Conference on the Safeguarding of Tangible and Intangible Cultural Heritage: Towards an Integrated Approach-Proceedings*. pp. 148–156. Nara: UNESCO.

Ota, S.B. 2008. *Bhimbetka.* New Delhi: Archaeological Survey of India.

Ota, S.B., J. Manuel and S.K. Pandey 2004. The Traditions around Fairs as Possible aids in Conservation Strategy. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Pande, B.M. 1999. Management of Bhimbetka and Adamgarh.In *Conservation of Rock Art*, (B.L. Malla, Ed.), pp. 53–60. New Delhi: Indira Gandhi National Centre for the Arts (IGNCA) and Aryan Books International.

Pandey, S.K. 2013. *Gods and Goddesses of the Daroi Gonds around Bhimbetka, Central India: A Study on their Intangible Cultural Heritage*. (Unpublished Ph.D. Thesis). Sagar: Dr. H.S. Gourd University.

Radhaballabhi Rekha 2004. Burgeoning Population as a Threat to the Integrity of Bhimbetka: Need for Providing Suitable Alternative Resources. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Ravindran, T.R., A.K. Arora, M. Singh and S.B. Ota. 2012. On- and off-site Raman Study of rock-shelter paintings at World Heritage site of Bhimbetka. *Journal of Raman Spectroscopy* 44(10): 108-113.DOI:10.1002/jrs.4148.

Sinha, M., H.Y. Bhai, S. Sekar, P. Babu and H. Kumar 2004. Geoscientific Investigation of Bhimbetka Rock Shelters. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Upreti, D.K., S. Nayaka and Y. Joshi 2004. Lichen Activity over Rock Shelters of Bhimbetka World Heritage Zone. Paper presented in *The RASI-2004 International Rock art Congress* held at Agra.

Wakankar, V.S. 1975. Bhimbetka – The Prehistoric Paradise. *Prachya Pratibha* 3 (2) : 7–29.

10. Tall Talk about Heritage Management? Need for a 'Subaltern' Approach to Archaeological Record in India

K. Paddayya

Abstract

Heritage consciousness is as old as humanity itself, motivating some of the thinkers to define man as *Homo historicus*. Heritage consciousness witnessed as it were a quantum jump after World War II. Freeing of many parts of Asia and Africa from colonial rule and the consequent rise of nationalist feelings, industrial expansion and loss of self, arising from urban life, and rapid increase in the layout of various developmental projects on the landscape, leading to destruction of ancient sites, have all contributed to the rise of a new awareness about heritage and its documentation and management. And heritage studies have emerged as an independent discipline in the academy during the last four decades or so.

Organized, although voluntary, efforts to study heritage in India commenced with the establishment of the Asiatic Society in Kolkata in 1784 by Sir William Jones. As a sequel to the famous Memorandum of 1861 submitted by Alexander Cunningham that the colonial government created ASI for the study and documentation of ancient sites and monuments. Surely legislative measures were also initiated. After Independence several other Acts followed, the creation of a National Monuments Authority being the latest one.

The efforts of governmental and voluntary agencies to study, protect and preserve the ancient sites are truly commendable. But these suffer from a serious gap. That is, more often than not these studies treat archaeological record as synonymous with large mound-bearing sites and imposing monuments. I want to argue that the archaeological record is essentially made up of hundreds and hundreds of small and medium-size sites of various kinds and of various periods. A true and meaningful reconstruction of settlement history of India, prehistoric to the medieval period, necessarily rests on the adoption of these refined and 'subaltern' research perspectives.

Keywords: Heritage Management; Subaltern Approach; Archaeological Record; Regional Approach

Introduction

In this paper, first of all, I intend to make a few observations about the development of heritage studies, which have now gained the status of an independent discipline. In this background, I would like to turn my attention to Indian archaeology and examine our conceptions of heritage in general and archaeological record in particular, and their management and use for academic research. My chief concern is to focus on the need to accord a larger place to the small-site component of the archaeological record.

Notwithstanding their rise to prominence in recent times, heritage studies have become an important component of the modern academy across the world although it is much younger than the disciplines of history and archaeology. Lowenthal has captured the vibrancy of this situation in a beautiful statement: "ALL AT ONCE HERITAGE IS EVERYWHERE – in the news, in the movies, in the marketplace – in everything from galaxies to genes. It is the chief focus of patriotism and prime lure of tourism. One can barely move without bumping into a heritage site. Every legacy is cherished. From ethnic roots to history theme parks, Hollywood to the Holocaust, the whole world is busy lauding – or lamenting – some past, be it fact or fiction" (Lowenthal 1998: xiii) (All caps in original). The literature on heritage studies and management has proliferated over the years. Two of David Lowenthal's books have spurred in me much interest in heritage studies: *The Past Is a Foreign Country* (1985) and *The Heritage Crusade and the Spoils of History* (1998).

Unlike other authors, in these two books, Lowenthal draws from his vast breadth of knowledge in the arts, humanities and social sciences and also from other sources such as science fiction, time travel, psychoanalysis, architectural shows and television programmes. Both these books treat heritage studies as an expression of human's innate curiosity to know about their own past, as can be recovered from memory, history and relics or archaeological sources. Students of all

historical and anthropological sciences will therefore find these books very readable and interesting.

In *The Past Is a Foreign Country* (1985: Chapter 2), Lowenthal examines the human's nostalgic attitude towards the past and then tells us about the benefits as well as the burdens of the past. The former includes familiarity and recognition, reaffirmation and validation, individual and group identity, guidance, enrichment and escape. But, as Lowenthal puts it, the past not only aids and delights, but it also threatens and diminishes us. Most of the advantages involve drawbacks, and most of the promises imply risks (1985; 63). The threats include fear of the evil things that took place in the past, undervaluation of the past, crippling effects on the creativity, among others. He then examines perceptions of the present in various epochs in the Western world: Renaissance era, seventeenth- and eighteenth-century England and France, Victorian era in Britain, and post–civil war period in America. The next part of the text is devoted to methodology in which Lowenthal tells us how the past is reconstructed on the basis of memory, history and relics.

In *The Heritage Crusade and the Spoils of History* (1998), Lowenthal narrates the circumstances that have led to the prominence of heritage studies in modern times. Two major factors have promoted the emergence of heritage consciousness and management as a distinct theme. First, as part of post-war reconstruction, there was worldwide economic boom during the 1950s and 1960s. Also during this period, many countries in Asia, Africa and Latin America became free from colonial rule. Nationalist spirit, as promoted by heritage consciousness, was one of the factors that facilitated this struggle. Archaeological sites located on the landscape also were subjected to the negative or destructive effects of various developmental schemes such as industrial expansion, agricultural intensifications, new housing colonies, mineral exploitation and expansion of communication systems (railways and roadways). Lowenthal further states that in the advanced countries, the isolation of self from group activity or community living, family dissolution, increasing loss of morality, loss of familiar surroundings, wholesale migration and increasing fear of technology led people to cherish heritage and the rural or simple way of life.

Second, consciousness of cultural heritage and its management derived support from the environmental protection movement, which began in the 1970s. The UN conference on environment held in Stockholm in 1972 was the first international attempt to tackle the issue of environmental protection. It was in this conference that the former Indian Prime Minister Indira Gandhi coined the term 'ecocide', a new concept of ecological destruction by humans. The alignment with the Green Movement gave heritage studies the much needed boost.

These two factors finally led to the recognition of heritage studies in the 1980s as an independent discipline in the academia in different parts of the world. The studies are a hybrid product of various sciences of the study of humans such as history, archaeology, anthropology and cultural geography. Also, the recognition of drastic nature of changes in or destruction of heritage sites on the landscape resulting from various land developmental projects has prompted the governments in Britain, France, Germany, United States, Canada and Australia to enact legislative measures as part of cultural resource management (CRM). These laws necessitated that all developmental projects have the antiquarian remains of the respective land plots surveyed and documented by competent archaeologists before initiating project works. The two volumes edited by Henry Cleere – *Approaches to the Archaeological Heritage* (1984) and *Archaeological Heritage Management in the Modern World* (1989) – provide useful information about the status of heritage studies and management in different parts of the world.

Status of Indian Archaeology

Turning to the situation in our own country, a brief sketch of developments in heritage studies and management will be useful here. The antiquarian studies in India commenced with the establishment of the Asiatic Society in 1784. With the exception of a few archaeological site discoveries such as ashmounds and megalithic monuments noticed by Colin Mackenzie in South India, these studies were confined to literary texts, art and architecture, numismatics and epigraphical records. Meadows Taylor's discovery of megalithic monuments in the Deccan and his excavation of a few stone circles at Jewargi in the mid-

nineteenth century represent an important step in field archaeology. Thanks to the prolonged efforts of Alexander Cunningham in Upper India and those of Robert Bruce Foote in South India, both historical archaeology and prehistory emerged as regular branches of archaeology, respectively, in the later half of the century. The discovery of the Indus Valley Civilisation dominated the scene in the second quarter of the twentieth century. Mortimer Wheeler, as the last British Director General of the Archaeological Survey of India (ASI), advocated the need for establishing regional time tables of cultures and this approach has continued into the post-Independence period.

As regards the management of archaeological heritage, some regulations were passed at the provincial level in both Madras and Bengal Presidencies in the early part of the nineteenth century. It was, however, during the stewardship of John Marshall that conservation became a regular component of the work of ASI. Systematic excavations at select group of sites and establishment of museums at important sites are other notable developments. Conservation of monuments became an established policy and some of the principles laid down by Marshall are still being followed. Also a national level preservation policy came into force with the enactment of Ancient Monuments Preservation Act of 1904, which placed sites and monuments of national importance under the control of the Central Government and the rest were left to the charge of provincial governments. The works of B.K. Thapar (1984, 1989) and H. Sarkar (1981: 92–150) furnish full details about the developments in heritage preservation and other legislative steps adopted by the Union Government after Independence. The creation of a National Monument Authority in 2011 is a major development of recent years; it imposes restriction on any construction activity in the vicinity of monuments of national importance.

The post-Independence period also witnessed the emergence of non-governmental organisations (NGOs) with an interest in the documentation and upkeep of monuments. The principal agency with an all-India connection among them is the Indian National Trust for Art and Cultural Heritage (INTACH), which was founded in New Delhi in 1984. There are also other agencies doing excellent work

on major monuments, such as Nalini Thakur's integrated study of Mehrauli heritage monuments and the Indian Archaeological Society's investigation of the chemical ill-effects of Mathura oil refinery on the Taj Mahal. Some of enlightened and vigilant citizens also quickly responded to the sad condition of some of our national monuments and took the matter to courts. M.C. Mehta, one of the advocates, has taken the matter of Mughal period monuments to courts in Delhi on more than one occasion. Rajiv Seth and half a dozen other advocates jointly petitioned the Supreme Court about the poor quality of upkeep of monuments of the Red Fort by the Ministry of Defence. The custody of these monuments was therefore transferred to the Ministry of Culture. R.S. Morwanchikar, a senior archaeologist from Aurangabad, filed a petition in the High Court and prevented the local administration from demolishing the arched gateways of the city belonging to the medieval period. I have also read in the newspapers some years ago about the observations of a visitor from Mumbai about the neglected condition of a colonial cemetery in the hill station of Mahabaleshwar. There are many more instances of how the civil society voiced its concerns about the preservation of our heritage.

As far as my knowledge goes, the first ever seminar on the management of India's heritage was held in Cambridge in 1983 jointly organised by Bridget and Raymond Allchins and B.K. Thapar. It was held as an extension activity of the Festival of India. Over two dozen experts presented papers on both natural and cultural heritage. The proceedings later appeared as a volume titled *The Conservation of Indian Heritage* (Allchin *et al.* 1989).

It must also be acknowledged that the central and state governments were alive to the threats to ancient sites arising from the construction of major irrigation dams across rivers. We have the famous example of Prime Minister Jawaharlal Nehru directing the ASI to take up major salvage excavations at Nagarjunakonda and relocate the monument in an island museum. Similar steps were taken to preserve the Chalukyas temple complex at Alampur on the Tungabhadra from the backwaters of the Srisailam Dam on the Krishna river. Then there is the famous, but little remembered, action of Prime Minister Indira

Gandhi who, after noticing the unstable financial condition of the Asiatic Society in Kolkata during her visit to the organisation in 1984, on the occasion of its bicentenary celebrations, moved the Parliament to accord the status of an institution of national importance to this organisation steeped in study of our past. She also shelved the Silent Valley project in Kerala to preserve the environmental sanctity of the Western Ghats.

It is clear from the discussion so far that all efforts in the preservation and upkeep of archaeological heritage are essentially focused on big sites and monuments. It is striking that this bias in favour of big sites also extends to the research domain. Even a quick glance at the history of Indian archaeology will show that our research endeavours have been swayed by the glamour of big sites and also that often regional archaeologies have been dominated by single sites. We know, for instance, how in the pre-Independence period Mohenjo-daro and Harappa dominated almost all the discussions about Indian archaeology. In historical archaeology, Taxila became the focus of attention for Marshall and its importance was further enhanced when Wheeler selected it as the base for conducting his lessons in field archaeology to train young Indian workers. While demitting his office as the Director General of ASI, Wheeler exhorted Indian archaeologists to establish what he called regional time tables of cultures. He himself ushered in this perspective both by identifying phases in the Early Historical period at Taxila and by undertaking a large-scale excavation at Brahmagiri in the Chitradurga district of Karnataka. Here the loosely scattered remains of the Neolithic, Iron Age and Early Historical period found hitherto on surface at various places in South India were now put in their respective stratigraphic contexts. Indeed Brahmagiri excavation served as the sheet anchor of South Indian chronology. Subsequently, Sanganakallu, Piklihal and Maski exposed a similar culture sequence. In Northern Deccan, Daimabad and Inamgaon excavations revealed an elaborate Chalcolithic sequence. In the Ganga valley, we have the well-known sites of Ahichchatra, Hastinapur and Atranjikhera, which exposed elaborate sequences covering protohistoric and Early Historical periods (for details, see Dhavalikar 1997, 1999).

In Stone Age studies, this culture sequence approach was initiated in the 1930s with the series I to IV framework constructed by Cammiade and Burkitt for the Kurnool region and the Soan culture sequence built up by De Terra and Patterson for north-western India. In the 1950s a grand sequence was built up by Sankalia at Nevasa in the Pravara valley of Northern Deccan. This sequence covers the period from Stone Age to medieval period through protohistoric and Early Historical periods. Within the Stone Age, Sankalia distinguished what he called I to IV industries (corresponding to Lower, Middle and Upper Palaeolithic and Mesolithic, respectively). In the next two or three decades, the Nevasa stratigraphical-cum-culture sequence model inspired a large number of similar studies by the staff and students of Deccan College in Andhra, Karnataka, Orissa, Maharashtra, Madhya Pradesh and Rajasthan. This approach was also adopted by Allahabad, Calcutta and other universities in their respective regions (for details, see Sankalia 1974).

Need for a Subaltern Approach

It must be admitted that the culture sequence approach and big-site strategy adopted for its implementation have enabled us to build a series of regional time tables of cultures. In other words, we have obtained a good understanding of the potentialities of various regions in terms of succession of prehistoric, protohistoric and historical periods. The results of these regional studies are commendable and form a secure basis for further studies.

At the same time, this culture history approach also suffers from certain serious limitations. In this approach, the archaeological record is regarded as more or less synonymous with big sites, be they Mohenjo-daros, Harappas or Dholaviras. It assumes that we can understand practically everything about the archaeological record of a given area if we have excavated a big site for several seasons and reconstructed its culture history based upon the exposed stratigraphical record. The fallacy here is that the so-called big sites could not have come into existence without the support systems received from a series of small and medium-size sites located in the surrounding areas. To give a simple riparian analogy, it is very much like assuming that a big

river can exist and maintain a good water regime without the water bodies contributed by its various tributaries.

It is here that the fresh ideas introduced by New Archaeology in the 1960s and 1970s about the goals and methods of the discipline assume importance (Binford 1972). Replacing earlier definitions of culture as a recurrent series of similar-looking artefactual assemblages, culture has now been viewed as a systemic whole whose component elements not only maintain dynamic interactions among themselves but also enter into intimate relationships with their respective ecological settings and surrounding social systems. This processual view of culture in turn called for a more inclusive definition of an archaeological record. It is a composite universe of artefacts, ecofacts and features or structures that occur together on the landscape as small or big clusters, or sites, but all linked to one another.

The third major departure attempted by New Archaeology concerns its emphasis on a regional approach to archaeological record. For example, David Thomas' (1995) study of hunter-gatherer sites of the Owens valley in Nevada, Glynn Isaac's 'scatters between patches' approach to Early Man sites in East Africa (1981) and Robert Foley's (1981) off-site approach to the Holocene hunter-gatherer and pastoral groups of Kenya and adjacent area serve as a reference point for the regional approach.

This subaltern approach to archaeological record (taking into account what are called non-sites or off-sites) and its investigation at the regional levels hold important lessons for Indian archaeology at the levels of both research domain and heritage management. In the research domain, several regional studies have already benefited from the use of these new perspectives in prehistory, protohistory and historical archaeology (for details, see Paddayya 2002: 134–6).

Let me draw your attention to a few major studies. First, my own prolonged studies (spread over a quarter century commencing in mid-1970s) dealing with the Acheulian sites of the Hunsgi and Baichbal valleys of the Shorapur Doab in Southern Deccan. This is a small erosional basin of Tertiary age located away from the left bank

of the Krishna river. It is an amphitheatre-like basin measuring about 500 sq. km. in extent. My prolonged foot surveys have brought to light over two hundred Acheulian localities scattered all over the basin floor. Investigation of these sites from the point of view of formation processes revealed interesting diversity in their contexts (primary sites, colluvial contexts and localities associated with fluviatile deposit). We could also distinguish various functional classes, such as camp sites, workshops, non-sites and animal food processing sites. As regards the spatial distribution of these sites, we could recognize two main clusters, each consisting of 20 or 25 localities, with one each located in the Hunsgi and Baichbal valleys. The remaining localities are dispersed randomly all over the landscape. I tried to explain this differential distribution of sites with reference to seasonality of climate. I argued that in the dry season the Acheulian occupants of the valleys aggregated near the perennial water sources as provided by spring flows in the beds of Hunsgi and Baichbal streams. Probably their food economy was essentially based on hunting and scavenging of large game. In the wet season, the Acheulian groups dispersed all over the valley floor and made use of shallow water bodies common on the valley floor. They exploited a variety of wild plant foods and also small fauna. Thus the Acheulian occupants of these two valleys adjusted their annual activity cycle by adopting season-oriented management strategies: (a) wet season dispersal all over the valley floor and reliance on wild plant foods and small fauna and use of seasonal water bodies available on the landscapes and (b) dry season aggregation near perennial water bodies as provided by spring flows in the beds of Hunsgi and Baichbal streams and exploitation of large-game animals by hunting and scavenging. My regional study benefited from ethnographic data pertaining to seasonal availability of surface water bodies and wild plant and animal foods (Paddayya 1982).

Then there are two outstanding examples from Early Historical archaeology, which also illustrate the usefulness of landscape archaeology. Sanchi in Central India is one of the very early Buddhist sites to be discovered in the country. For long, archaeologists were preoccupied with the study of its architecture and art historical features. It was left to the young British scholar Julia Shaw to initiate a regular

survey of the archaeological remains of the surrounding area for explaining the economic basis of the very existence of this site for several centuries. Shaw's work *Buddhist Landscapes in Central India* (2007) was the result of a detailed field investigation of the various archaeological features and remains covering an area of 750 sq. km. around Sanchi. This field study brought to light a large number of small- and medium-size sites and features of various kinds and revealed how wet-rice cultivation, as facilitated by a network of small dams raised on the local streams originating in the hills, provided the much-needed economic support for the rise of urbanisation in the area and establishment of Buddhism during the third and second centuries BCE. Shaw's work also gave insights into the social and inter-religious contexts, which promoted the rise of a flourishing Buddhist monastic centre at Sanchi.

Interestingly enough, a decade earlier, an equally interesting field project was undertaken in Sri Lanka. A joint team of Sri Lankan and Swedish archaeologists led by Professor Senake Bandarnayake undertook a similar landscape archaeology project in the region of the famous Early Historical sites of Sigiriya and Dambulla. This project was based on the premise that major town centres like Sigiriya and Dambulla could not have developed without the production support system of a vast network of small village-level settlements in the surrounding areas. As emphasised by the project investigators themselves, "the remains of the village communities that formed the life support systems of these non-producer centres must lie in their environs" (Bandarnayake *et al.* 1990: 16). Indeed the intensive field survey and mapping done in the area by this project team in 1989 brought to light a large number of sites containing evidence related to production of various kinds of material goods and also crucial field data bearing upon tank irrigation in the area dated between 2nd century BCE and 3rd century CE.

Finally, an outstanding example of landscape archaeology as applied to the medieval period. We have the famous medieval city of Vijayanagara on the Tungabhdra river. Like Sanchi, this site also has a long history of discovery and field investigations, but all these studies were focused on history and imposing civilian and religious monuments

forming part of the metropolis. There was hardly any awareness about the existence of other archaeological sites in the hinterland and their role in the emergence of the capital city. It was left to the American archaeologists Carla Sinopoli and Kathleen Morrison to initiate field projects to fill up this gap. Their metropolitan surveys involved more than one season of field walking and led to the identification of several hundred localities linked to production systems of various kinds including tank irrigation. These surveys also resulted in the identification of many sites of other periods (Sinopoli and Morrison 2007; Morrison 2009).

The small number of case studies cited thus far should serve as a wake-up call to researchers in India about the benefits that accrue from both shift of emphasis from a big-site notion to a holistic perception of archaeological record and change from one-site approach to a regional focus in our field studies. I strongly believe that these new approaches are equally valid in prehistory, protohistory and historical and medieval archaeology. Making this statement as I do from Thanjavur, I believe that the Kaveri deltaic zone containing a rich number of archaeological sites of the Pallava and Chola periods is a potential area for testing these new approaches in field archaeology. I learn that already an attempt has been made in understanding the landscape archaeology in the Lower Kaveri delta (Selvakumar *et al.* 2016).

My observations so far about the need to adopt a subaltern approach to the archaeological record and its advantages in regular academic projects are equally applicable in the case of heritage management. Here again I notice that a big-site approach is widely prevalent in our country. It is not uncommon that a hue and cry is raised when some little damage is caused to well-known monuments such as Taj Mahal, Qutub Minar or Ajanta paintings by human or natural agencies, and newspapers capture it as a prominent headline. Soon some action is initiated to deal with the situation. But, unfortunately, not many of us are aware of the fact that small- and medium-size sites of various time periods spread over the landscape are vanishing at an alarming rate in the country due to the initiation of a whole series of land development projects. These include reclamation of lands for agricultural purpose,

major irrigation projects, layout of various industrial projects, mining operations and development of road and railway networks. Inevitably all these operations on the landscape infringe upon and even destroy archaeological sites. The tempo of these developmental processes has increased tremendously in recent decades and small- and medium-size sites are the worst affected. Therefore it becomes inevitable to stress the importance of small-site records scattered on the landscape for reconstructing meaningful regional settlement histories.

I will illustrate my agony about the increasing loss of small-site record with reference to the archaeological sites of the Shorapur Doab in Southern Deccan (Paddayya 2018) (Fig. 1). My prolonged field studies in the area since 1965 led to the discovery of several hundred sites belonging to several eras ranging from the Lower Palaeolithic to Iron Age. The vast majority of Stone Age sites are no more than thin scatters of lithic remains covering the size of a lawn tennis court. With the introduction of river water irrigation into the Doab from the 1980s, as facilitated by the construction of a large dam across the Krishna at Narayanpur, many of the Stone Age sites have been badly disturbed and have now become paddy fields (Fig. 2). Even Iron Age sites have suffered a similar fate. Let me cite the case of the famous Jewargi site of stone circles on the Bhima river. Meadows Taylor discovered it in the middle of the nineteenth century and he plotted over a hundred stone circles. He even employed the stratigraphical method for excavating two or three graves. During my visit to the site in 2002, I found just three or four circles intact and the site was used for soil quarrying, agricultural expansion and building hutments for the economically backward groups (Figs. 3 and 4). Similar situations exist in most other parts of the country.

How do we come to grips with this unfortunate situation? I suggest a three-fold strategy. First, I have been suggesting in the CABA (Central Advisory Board on Archaeology) and Standing Committee meetings of the ASI and in seminars and workshops that both university and government departments should give top priority to survey and documentation work in field studies for the next 15 to 20 years. My suggestion has not cut much ice. But I still feel there is a real need to

revive and enlarge village-to-village survey work of the kind undertaken by the ASI during the regime of Shri A. Ghosh. Likewise, university departments could allocate topics in survey archaeology as themes for dissertations at different levels. Immediate attention should be given to areas where major developmental projects have been initiated. The

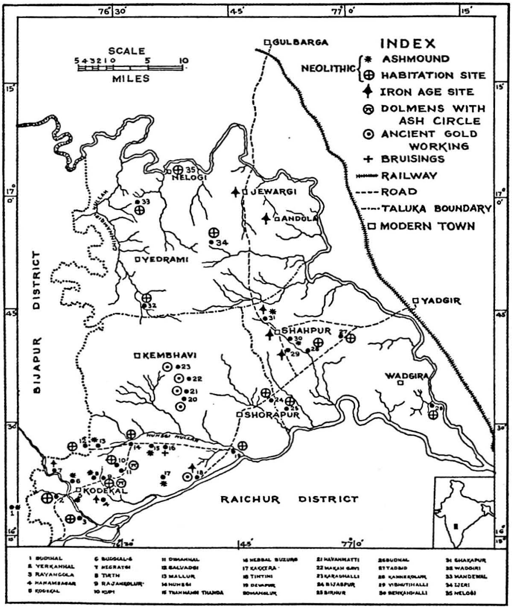

Fig. 1. Map of the Shorapur Doab in North Karnataka showing important archaeological sites (Source : author)

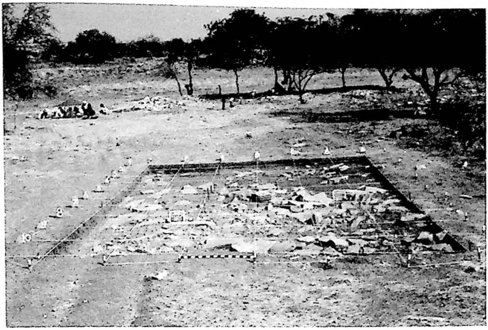

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Fig. 2. (a) Isampur Acheulian site in the Hunsgi valley. (b) Site area now forming part of a paddy field (Source : author)

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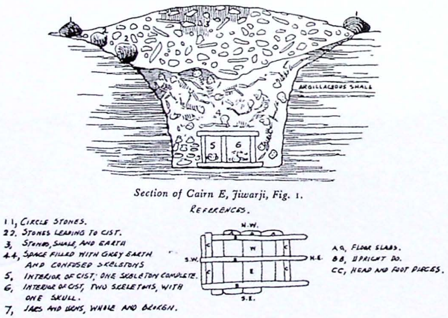
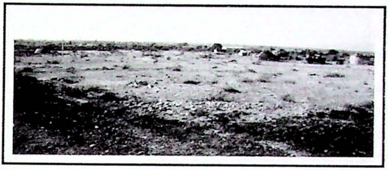


b

Fig. 3. (a) Meadows Taylor's sketch of Iron Age stone circles at Jewargi, Shorapur Doab. (b) Taylor's recording of stratigraphy exposed in excavation in one of the stone circles (Source : author)



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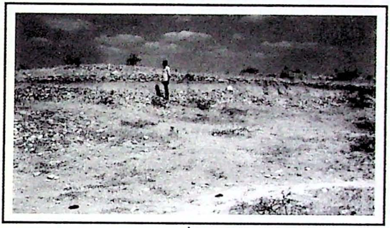

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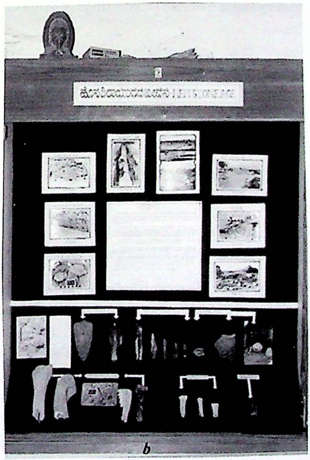
Fig. 4. Disturbed condition of the site of stone circles at Jewargi, Shorapur Doab: (a) a portion occupied by modern tenements; (b) part of the site used for soil quarrying; and (c) irrigation canal cutting across the site (Source : author)

data obtained from these surveys could be used for building up local and regional archaeologies. In some cases, this data may serve as a true asset for formulating major research projects.

Second, there is a clear need to educate local communities about the archaeological heritage scattered around their villages. While these groups may be mostly lacking in education, they still have a good sense of the past. When properly informed about the importance of ancient sites around their settlements, they do develop legitimate pride in their heritage and even come forward to act as its trustees. The Hunsgi Mandal Panchayat in the Shorapur Doab took my suggestion seriously and established a permanent display of local archaeological material in the local panchayat office (Fig. 5).

The third measure concerns enacting suitable legislation. As mentioned before, many of the countries in Western Europe and North America have already passed cultural resource management laws. These laws require both government and private development agencies to use a portion of project funds for survey and documentation of antiquarian remains of land plots earmarked for development. During the tenure of I.K. Gujral as the Prime Minister, some attempts were made by both historians and archaeologists to persuade the Indian government to enact a CRM legislation. Then in 2014 at the joint annual conference of the Indian Archaeological Society and Indian Society for Prehistoric and Quaternary Studies held in Pune, a similar resolution was passed and sent to the Prime Minister's office. But, unfortunately, these efforts have not met with much success. These legislative measures, as and when enacted, will not only facilitate documentation of much useful settlement history data, which otherwise will vanish without a trace, it will also increase the job potential for young researchers.

a



b

Fig. 5. a) Hunsgi Mandal Panchayat office in the Shorapur Doab; b) Display of local archaeological remains in the meeting hall of the building (Source : author)

References

Allchin, B., F.R. Allchin and B.K. Thapar (Eds.) 1989. *Conservation of the Indian Heritage*. New Delhi: Cosmo Publications.

Binford, L.R. 1972. *An Archaeological Perspective*. New York: Seminar Press.

Bandaranayake, S., M. Morgen and S. Epitawatte. 1990. *The Settlement Archaeology of the Sigiriya-Dambulla Region*. Colombo: Institute of Archaeology.

Cleere, H. (Ed.) 1984. *Approaches to the Archaeological Heritage: A Comparative Study of World Cultural Resource Management Systems*. Cambridge: Cambridge University Press.

Cleere, H. (Ed.) 1989. *Archaeological Heritage Management in the Modern World*. London: Unwin Hyman.

Dhavalikar, M.K. 1997. *Indian Protohistory*. New Delhi: Books and Books.

Dhavalikar, M.K. 1999. *Historical Archaeology of India*. New Delhi: Books and Books.

Foley, R. 1981. *Off-Site Archaeology and Human Adaptation in Eastern Africa*. Oxford: BAR International series 97.

Isaac, G. 1981. Stone Age Visiting Cards: Approaches to the Study of Early Land Use Patterns, in *Pattern of the Past: Studies in Honour of David Clarke* (I. Hodder, G. Isaac and N. Hammond Eds.) pp. 131–156. Cambridge: Cambridge University Press.

Lowenthal, D. 1985. *The Past Is a Foreign Country*. Cambridge: Cambridge University Press.

Lowenthal, D. 1998. *The Heritage Crusade and Spoils of History*. Cambridge: Cambridge University Press.

Morrison, K.D. 2009. *Daroji Valley: Landscape History, Place and the Making of a Dryland Reservoir System.* New Delhi: Manohar and American Institute of Indian Studies.

Paddayya, K. 1982. *The Acheulian Culture of Hunsgi Valley (Peninsular India): A Settlement System Perspective.* Poona: Deccan College.

Paddayya, K. 2002.A Review of Theoretical Perspectives in Indian Archaeology, in *Indian Archaeology and Historiography: History, Theory and Method* (Indian Archaeology in Retrospect, Volume IV) (S. Settar and R. Korisettar Eds.), pp. 117–157. New Delhi: Indian Council of Historical Research and Manohar.

Paddayya, K. 2018. Heritage Management with Special Reference to Modern Impacts on Archaeological Sites of Lower Deccan, in *Indian Archaeology and Heritage Education: Historiographical and Sociological Dimensions* (K. Paddayya Ed.), pp. 279–302.New Delhi: Aryan Books International.

Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan.* Pune: Deccan College.

Sarkar, H. 1981. *Museums and Protection of Monuments and Antiquities in India.* Delhi: Sundeep Prakashan.

Selvakumar, V, K. Mathivanan, V. Parandaman, Jaseera Majeed, A. Raja, R. Santhanam and G. Manikandan and R. Karthikeyan 2016. Iron Age-Early Historic and Medieval Settlements in the Lower Kaveri Valley: A Preliminary Report of the Archaeological Excavation at Ambal (2015-16), Nagapattinam District, Tamil Nadu. *Puratattva* 46: 168-174.

Shaw, J. 2007. *Buddhist Landscapes in Central India: Sanchi Hill and Archaeologies of Religious and Social Changes, c. Third*

Century B.C. to Fifth Century A.D. London: The British Association for South Asian Studies.

Sinopoli, C.M. and Morrison, K.D. 2007. *Vijayanagara Metropolitan Survey,* Volume 1. Ann Arbor, MI: University of Michigan Press.

Thapar, B.K. 1984. India, in *Approaches to Archaeological Heritage: A Comparative Study of World Culture Resource Management Systems* (H. Cleere Ed.), pp. 63–72. Cambridge: Cambridge University Press.

Thapar, B.K. 1989. Policies for the Training and Recruitment of Archaeologists in India, in *Archaeological Heritage Management in the Modern World* (H. Cleere Ed.), pp. 285–291. London: Unwin Hyman.

Thomas, D.H. 1975. Non-Site Sampling in Archaeology in the Creek without a Site, in *Sampling in Archaeology* (J.W. Mueller Ed.), pp. 61–81. Tucson, AZ: University of Arizona Press.

11. Heritage Management and Public Archaeology in the Context of Indian Prehistory

Shanti Pappu and Kumar Akhilesh

Abstract

India's rich and diverse prehistoric archaeological heritage is currently under threat, owing to rapid infrastructure development coupled with a low public awareness of the topic. At present, a general approach in India has been a focus on monuments and built heritage, rather than the fragile prehistoric past relating to the earliest occupation of South Asia, a phenomenon that we have termed the 'Taj Syndrome'. Here, we discuss case studies from Tamil Nadu, South India, where our project attempts to unite research goals with those of policies for site conservation and public archaeology. We discuss the following aspects: 1. research programs including excavations at Attirampakkam and studies at other prehistoric sites in northern and southern Tamil Nadu; 2. use of satellite remote sensing and field investigations to address research questions and for developing strategies to map impacts at prehistoric sites; 3. development of policies for site-conservation and protection; 4. predictive location modelling for rapid discovery of new sites; 5. public archaeology programs involving children and teachers to develop an interest in and awareness of archaeology; and 6. development of modules to train university students and young faculty in new approaches in the study of prehistory archaeology, and 7. the positive and negative impacts of the involvement of amateur enthusiasts and the wider community in archaeology. We conclude by emphasizing the need for holistic programs in South Asia, combining research with public awareness programs to ensure development of alternate conservation strategies. We stress the urgent need for legislations concerning impact assessment prior to any minor/major development project, adapting from patterns adopted elsewhere in the world.

Keywords: Heritage Management; Public Archaeology; Prehistory; Attirampakkam

Introduction

As we write this note, much of India's prehistoric heritage is being destroyed by a combination of factors ranging from rapid infrastructure development to a relatively low public awareness of what such sites and artefacts look like (Pappu 2006). Historically, in India, a greater focus has been laid on conservation of built heritage: monuments, works of art and architecture that have a distinct visibility in the landscape, and are interwoven into the socio-economic, religious and political contexts of communities (Pappu 2006). In contrast, the fragile prehistoric heritage, marked by lithics, fossil fauna, occasional burials or other features, eroding from, and buried within ancient sediments, are less visible across landscapes, and lack a significant cultural or emotional connect with local communities. We have previously termed this neglect of sites marking the earliest occupation of South Asia as the 'Taj Syndrome' (Pappu 2006). In recent years, research in Indian prehistory has resulted in new interpretations and discoveries raising its significance in the context of global issues in prehistory (Akhilesh *et al.* 2018; Paddayya and Petraglia 1997; Petraglia *et al.* 2007; Pappu *et al.* 2011a; Mishra *et al.* 2013). Despite this, prehistory continues to be neglected in terms of building programs that range from research to awareness creation and heritage management planning. It is this theme that we focus on here:- a call for developing comprehensive projects that begin with research and culminate in public awareness and outreach. We discuss one such example, drawing from our own research projects in Tamil Nadu, where we attempted to unite research goals with those of policies for site conservation and public archaeology. We emphasise the need for holistic programs in South Asia, combining research with public awareness in order to ensure development of alternate conservation strategies. We stress the urgent need for legislations concerning impact assessment prior to any minor/major development project, adapting from patterns adopted elsewhere in the world. We discuss our work under three major integrated structures as noted below.

The Research Component

The project, *Prehistory and Palaeoenvironments in Southeast India,* aims at investigating key questions on the nature of prehistoric occupation with respect to the changing Pleistocene environments;

developing a chronology for sites, investigating long-term behavioural strategies drawing on studies of lithic assemblages, understanding key issues in lithic technology and reduction sequences through time, amongst other questions on the timing and nature of hominin dispersals across South Asia. This multidisciplinary approach, in collaboration with various research institutes and publications (Akhilesh *et al.* 2018; Pappu *et al.* 2009, 2010a, 2010b, 2011a, 2011b; Pappu and Akhilesh 2019), was geared to address specific research questions, and to allow for long-term evolution of ideas as the project progressed over time. Excavations were initiated at key sites to address specific questions of the project. Thus, long-term excavations and research at Attirampakkam (henceforth ATM), led to the investigation of the some of the earliest occupation horizons in South Asia. Acheulian assemblages at ATM (Akhilesh and Pappu 2015; Pappu 2011a; Pappu and Akhilesh 2019), were exposed in test-pits and trenches excavated across the site. The Acheulian horizons, in excellent state of preservation, occur in fluvial silt-rich clay (layers 6 and 8), with one gravel interlayer (layer 7). The sequence constitutes part of a small Pleistocene floodplain consisting of suspended load material sourced locally by the Cretaceous shale outcrops in the catchment (Pappu *et al.* 2011a). The Acheulian reduction sequence at ATM is characterized by a preference for tools on large flake blanks detached using a range of giant or large core technologies (Akhilesh and Pappu 2015). The varied reduction sequences are primarily related to late-stage biface thinning at the site (Akhilesh and Pappu 2015). The Acheulian horizons are disconformably overlain by progressively younger strata (Layers 5 to 1). Luminescence dating of these artefact-bearing layers has shown that phasing out of the Acheulian culture and phasing in of a Middle Paleolithic culture occurred 385 ± 64 ka, i.e. much earlier than conventionally presumed for South Asia. The Middle Paleolithic culture at ATM endured until 172 ± 41 ka (Akhilesh *et al.* 2018) and are marked by significant behavioural transformations reflected in changing lithic technology and assemblage composition. Ongoing experimental studies (Akhilesh and Pappu 2015) and microwear analysis of lithics are aiding in reconstructing past behavioural changes at this site. Palaeovegetation data from phytoliths collected from the site revealed fluctuating

vegetation through time reflecting varied local environments, and consistent with palaeoclimatic data derived from rock magnetic studies (Premathilake *et al.* 2017; Warrier *et al.* 2011). At ATM, however, because of lacunae in the depositional record the stratigraphy failed to document crucial phases of the Late Acheulian (between ~1 Ma-380 ka) and later (post-74 ka) MP (Akhilesh *et al.* 2018). It was hypothesized that the stratigraphic gap between the early Acheulian and early MP could be filled by locating Late Acheulian sites in the vicinity of ATM. Following extensive surveys, one site selected for this was Sendrayanpalayam where currently excavations are ongoing, resulting in important data on the terminal Acheulian.

In addition to this, we initiated projects of investigating the nature of microlithic sites in association with the *Teri* red sand dunes in southern Tamil Nadu. A test-pit at the site of Sawyerpuram, and regional surveys of sites in this region (Akhilesh *et al.* 2017), led to the discovery of numerous microlithic assemblages that are currently under study. The significance of this work lies in the potential for comparative studies with Sri Lankan microlithic sites as also in terms of situating them in the context of discoveries in northern Tamil Nadu and elsewhere in South India (Akhilesh *et al.* 2017 and references within). Along with excavations, a major aspect of the research project involved regional surveys. An area of around 8000 km^2, comprising basins of the rivers Arani, Kortallaiyar, Cooum, Adyar, Palar and Cheyyar (Chatterjee et al. 2017; Pappu *et al.* 2009, 2010a, 2010b, 2011b), and further south in the basins of the river Tambraparani were initiated (Akhilesh *et al.* 2017). Here, in addition to field surveys, use of a satellite data at differing resolutions were used not to research site locations and distribution and other related questions, for predictive locational modeling to locate new sites, and to develop a comprehensive heritage management plan for this region (Pappu et al.2009, 2011b). The research component culminated not only with data collection but also with devising suitable storage methods for prehistoric lithics (Pappu and Akhilesh 2015).

Impact Assessment Component

In addition to the research component, we initiated a program to utilise both field surveys and satellite data to measure impacts caused

by various sources (infrastructure, water bodies, etc., see Pappu *et al.* 2009; 2010a, 2010b, 2011b for details) to accurately measure the state of preservation of prehistoric archaeological sites. This was part of a larger heritage management plan for prehistoric sites. This resulted in a comprehensive database for sites (Pappu *et al.* 2009, 2010b) that forms the basis for planning further policies for managing at site or landscape scales. Key aspects of destruction involve agriculture, in particular mechanised cultivation, infrastructure development, water body widening and construction, and associated modern quarrying activities. In addition to mapping impacts at sites at varying buffer radii, we defined impacts at what we designated as 'prehistoric zones' to suggest strategies ranging from sites to landscapes. Overlying cadastral maps aided in defining land-ownership details for specific prehistoric sites (Pappu *et al.* 2010a,b). Following consideration of impacts suffered and scientific significance, remedial measures were also proposed (Pappu *et al.* 2009, 2011b). This proceeded along with adoption of predictive locational modelling strategies to rapidly predict areas where new sites may be found. Following testing of this model and its success, we are now able to expand this to other regions to enable speed in identifying potential new sites (Pappu *et al.* 2010b). Together, these form the basis for planning for heritage management of prehistoric sites in this region.

Public Outreach and Capacity Building Component

One of the key areas of our project involves public outreach. For this purpose we established a small children's museum in a school (Pappu 2000), with subsequent expansion of the same in our Centre (http://www.sharmaheritage.com). This is based on the theme of: 'Create, Connect and Communicate'. This involves creation of a unique environment to enhance children's learning experiences in the field of Indian heritage, to encourage creativity and skill development and enhance imagination through well-conceived displays, exhibits and learning modules; to connect scientists and children through interaction with research scholars at, and visiting the Centre, and to communicate cutting edge research in Indian prehistory and other aspects of archaeology and past environments to children, teachers, and other interested groups. To achieve this aim, we began with

conducting workshops for children (ages from 5 years and above) in the fields of prehistory, human evolution, evolution of agriculture, early civilizations, ancient metallurgy, pottery through time, lithics and other ancient craft traditions, amongst other topics. Modules follow a definite structure designed to suit the age of the child, school context and background, and language preference. They include a short introductory talk with a range of hands-on activities designed to bring alive key aspects of the topic concerned. At every stage, interaction with experts is encouraged. Thus, for example, a 'mock-excavation' will be integrated with questions designed to raise an awareness of how archaeologists excavate, as also ways in which artefacts/fossils, etc. are interpreted, both on-site and in the laboratory. Topics related to human evolution involve observation of replica fossil casts and discussion on topics related to this theme. Introduction to stone tool technology involves demonstrations of knapping tools and hands-on knapping, with experts (Dr. K. Akhilesh) under careful safety protocols. Activities involving tool-use on different materials is also included in the program. Modules related to rock art, may for instance, include themes of story-building, making suitable paints and brushes and depicting and discussing ideas. At every stage, conveying accurate information and encouraging creativity are significant aspects of the program. Special care is taken for inclusive workshops with challenged children participating in all activities. In addition, multiple disciplines, such as mathematics, geology, and natural sciences are integrated into the modules to stress the interdisciplinary nature of the subject. Palaeo environmental workshops are conducted through talks by experts, and by hands-on activities regarding, for example, modelling how fossils are formed, or examining ancient pollen through microscopes. Every workshop concludes with highlighting the importance of conservation, proper behaviour at prehistoric and other archaeological sites and a discussion on how children can help in bringing about an awareness of India's heritage (Fig.1). This also involves publication of children's books (http://www.sharmaheritage.com).

At the other end of the spectrum, are workshops for college and university students at the undergraduate level; followed by more

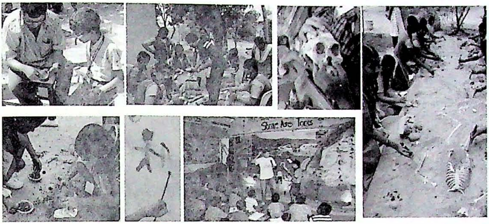


Fig. 1. Activities conducted during workshops on human evolution, prehistory and rock art (Source: Sharma Centre for Heritage Education).

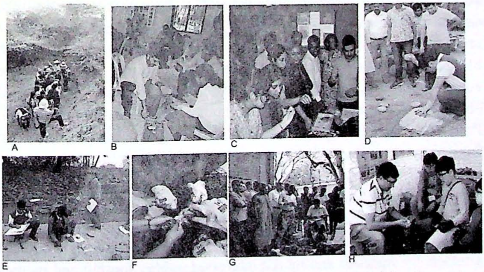


Fig. 2. Capacity building for university students and faculty and invited workshops showing: A-D. Workshops on prehistory and lithic studies, and field trips, conducted by the Sharma Centre for Heritage Education; E-H. Invited workshops conducted in India and abroad. (Source: Sharma Centre for Heritage Education).

intense ones for postgraduate, doctoral and postdoctoral students, early career faculty (Fig. 2). The latter series are primarily based on prehistory and lithic studies, and held under the Robert Bruce Foote series, or conducted for the benefit of students from a range of disciplines such as those under the INQUA-HabCom program of workshops on 'Prehistory, plants and people' (Akhilesh *et al.* 2014). Further, traveling workshops for children and university students, based on invitations from other Institutes, Universities, government departments were conducted in Arcot, Udaipur, Nagaland, Delhi, Bhopal, Colombo, Ruhuna and South Korea amongst other places (Fig. 2).

Conclusion

The combination of research, management and public outreach, is one way in which large projects may be structured to enable not only scientific outputs, but also to suggest potential strategies for conservation to the relevant authorities and to implement public outreach programs for enabling long-term conservation. Capacity building for students must be involved in projects in various ways. Our projects presented here, suggest one of many models by which research programs in prehistory may be planned and implemented to varied extents. While not infallible, and while unable to control or stop the destruction of sites, such projects serve to raise some awareness of this neglected subject to as wide a reach of stakeholders as possible. It is hoped that in future, more extensive conservation may be implemented in the field, through collaborative efforts of Institutes, government bodies and local communities. Prehistoric archaeology in India is in a crucial phase today. On the one hand, ongoing research is serving to highlight the significance of India on a global scale (Akhilesh *et al.* 2018; Pappu *et al.* 2011a). On the other hand, the scale of destruction of sites is immense. Lastly, we touch on the topic of tourism at prehistoric sites. In our view, the fragile nature of sites is not conducive for tourism, as this has led to random collection of artefacts by students, and by the interested public, footfall and picnics leading to trampling of artefacts and damage of sediments, and dangers of ancillary infrastructure activities. It is suggested that reconstructions of important sites may be made at local museums, or dissemination of information may be made through government offices, e.g. mini-

museums at the district collector's headquarters or other public spaces. Through comprehensive holistic projects and implementation of impact assessment legislations, multiple organisations must work together to conserve sites and enable future generations to appreciate and research India's prehistoric heritage.

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References

Akhilesh, K., S. Pappu, R. Premathilake, A. Krishnamurthy, S. Prasad. 2014. Palaeoanthropological perspectives on plant communities in South INQUA-HaBCom Workshop. Quaternary Perspectives 21 (2):2-3.

Akhilesh, K. and S. Pappu. 2015. Bits and pieces: Lithic waste products as indicators of Acheulean behaviour at Attirampakkam, India. Journal of Archaeological Science: Reports 4: 226–241.

Akhilesh, K., Pappu, S., Rajapara, H.M., Gunnell, Y., Shukla, A.D., Singhvi, A.K., 2018. Early Middle Palaeolithic culture in India around 385–172 ka reframes Out of Africa models. Nature 554: 97.

Akhilesh, K., S. Pappu, S. Ravindranath, Uday Raj., 2017. Shifting Sands:A Review of Research on Microlithic Sites associated with Teri Dunes of Tamil Nadu, in *Prehistoric Research In the Indian Subcontinent A Reappraisal and New Directions,* (K. Paddayya, and B. Basak Eds.), pp. 215-236. Delhi: Primus Books..

Chatterjee, M., K. Akhilesh, S. Pappu, S. Ravindranath and Udayaraj 2017 A Late Palaeolithic assemblage at Kunjaram, south-east India. *Antiquity Project Gallery* 91(360).

Mishra, S., N. Chauhan, A.K. Singhvi. 2013. Continuity of Microblade Technology in the Indian Subcontinent Since 45 ka: Implications for the Dispersal of Modern Humans. *PLoS One.* 8(7): e69280. doi: 10.1371/journal.pone.0069280.

Paddayya, K. and M. Petraglia 1997. Isampur-An Acheulian workshop site in the Hunsgi Valley, Gulbarga District, Karnataka. *Man and Environment* 22: 94-100.

Pappu, S. 2000. Archaeology in Schools: An Indian Example. *Antiquity* 74(2000): 485-6.

Pappu, S. 2006. Prehistory in Tamil Nadu: The Need for Links and Communication, in *Negotiations with the Past: Classical Tamil in Contemporary Tamil* (M. Kannan and Carlos Mena Eds.), pp. 1-24. Pondichery: Institut francais de Pondichery, and Berkley, University of California.

Pappu, S. and K. Akhilesh, 2019. Tools, Time and Trails: Debating Acheulian group size at Attirampakkam, India. *Journal of Human Evolution* 130: 109-125.

Pappu, S. and Kumar Akhilesh. 2015. A cost-effective and safe method for storing small lithic artefacts, *Antiquity,* project gallery, Url: http://antiquity.ac.uk/projgall/pappu343

Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath and Uday Raj 2009. A Forgotten Heritage: Impact Assessment Studies at Prehistoric Sites in Tamil Nadu, in *Space, Time and*

Place, III International Conference on Remote Sensing in Archaeology, 17-21 August, 2009, Tiruchirappalli, (Maurizio Forte, Stefano Campana and Claudia Liuzza Eds.), pp. 253-263. Oxford: BAR International Series 2118.

Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath, Uday Raj and Yanni Gunnell 2010a, Research and Management of Palaeolithic resources in Tamil Nadu, South India, *Antiquity Project Gallery,* Url: http://antiquity.ac.uk/projgall/pappu325./

Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath and Uday Raj 2010b. Applications of Satellite Remote Sensing for Research and Heritage Management in Indian prehistory. *Journal of Archaeological Science* 37: 2316–2331.

Pappu, S., Gunnell, Y., Akhilesh, K., Braucher, R., Taieb, M., Demory, F., Thouveny, N., 2011a. Early Pleistocene presence of Acheulian hominins in South India. *Science* 331: 1596-1600.

Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath, Uday Raj 2011b. From Stone Tools to Satellites: Recent Research into the Prehistory of Tamil. *Ancient India, Bulletin of the Archaeological Survey of India, New Series* 1: 87-100.

Petraglia, M, R. Korisettar, N. N. Boivin, C. Clarkson, P. Ditchfield, S. Jones, J. Koshy, M.M. Lahr, C. Oppenheimer, D. Pyle, R. Roberts, J.L. Schwenninger, L. Arnold, K. White, 2007. Middle Paleolithic assemblages from the Indian subcontinent before and after the Toba super-eruption, *Science* 2007 Jul 6; 317(5834):114-6.

Premathilake Rathnasiri, Kumar Akhilesh, Krishnamurthy Anupama, Shanti Pappu, S. Prasad, Yanni Gunnell, G. Orukaimani. 2017. Phytoliths as indicators of Quaternary vegetation at the Paleolithic site of Attirampakkam, India. *Journal of Archaeological Science*: Reports 14: 479–499.

Warrier, A.K., K. Sandeep, B.G. Harshavardhana, R. Shankar, Shanti Pappu, Kumar Akhilesh, C.N. Prabhu and Y. Gunnell. 2011. A Rock Magnetic record of Pleistocene Rainfall Variations at the Site of Attirampakkam, Southeastern India. *Journal of Archaeological Science* 38 (12):3681-3693.

12. The Preservation of Rock-cut Structures of Western Maharashtra and Conservation Challenges

V.N. Prabhakar

Abstract

The rock-cut structures of western Maharashtra, India, are among the earliest examples in basalt rock formations. A gradual development of rock-cut architecture could be noticed in this region, where these structures also evolved with the understanding of geological formations by the earliest excavators, thereby coping up with the deformations and irregularities in the rock formation processes. This led to an understanding for selecting suitable rock formations, which is clearly exhibited by rock excavations that date some 200–300 years later from the earliest excavations. The ancient dwellers also resolved the challenges of poor geological formations by adopting ingenious strategies. The modern-day challenges of conservation are equally difficult in comparison to the ancient ones. The conservation challenges are now well understood through a process of identifying the proper geological formation processes and their uniqueness, which vary from rock formation of different regions, evolving different strategies varying from structure to structure. The prominent rock-cut structures that were studied by Archaeological Survey of India (ASI) with the help of Geological Survey of India (GSI) are Ajanta, Ellora, Pitalkhora and Aurangabad Caves, whose time span ranges from 3rd to 2nd centuries BCE to 12th to 13th centuries CE and also represent the best examples of its kind. The conservation strategies adopted include rock-cut drains, contour and surface water drains to divert the rainwater entering into the cave system, identifying the various fault zones in the rock formations and adopting suitable remedial measures, challenges arising due to preservation of murals in many of the caves. This paper elaborates these challenges.

Keywords: Conservation, Preservation, Basalt, Rock-cut Cave, Green Bole, Red Bole

Introduction

The tradition of building memorial structures over the mortal remains of humans can be traced back at least to the Neolithic times in the South Asian context (Prabhakar 2015). This tradition developed into a detailed process of interment of dead during the Harappan times, and the tradition continued during late/post-urban phase of the Harappan culture. The erection of tumulus over the interred human corporeal remains is a tradition that can at least be traced back to the Harappan times and is substantiated from the evidence from Dholavira, Gujarat (Bisht 2014). *Stupa* is one type of funerary monument built in India from the ancient times. The tradition that Gautama Buddha, in his deathbed, suggested for the erection of *stupas* over his mortal remains is well known (Mitra 1971). Thus, the *stupa* became an essential part of the Buddhist ideology and architecture, the evolution of which can be seen in various manifestations, starting at least from 4th century BCE onwards. Similarly, the dwelling places associated with the various religious sects such as the Ajivikas and Buddhists also serve as an important component in the overall spread of these religious ideologies. The earliest of these dwellings for the monks and saints date back to at least 3rd century BCE as attested from the royal donations of the Mauryan period at a few places, for example, Sudama caves in Bihar. The tradition of housing the monastic settlements hewn out of solid rock formations, in particular, on granitic outcrop in the Sitamarhi and Nagarjuni Hills, Bihar, completely followed the wooden prototypes of the contemporary period. This is also a clear indication of the existence of similar monasteries and dwelling for the religious followers in perishable medium, which have not survived. The spread of Buddhism after the third Buddhist council at Pataliputra, which also coincided with the compilation of *Kathavastu,* duly supported by the emperor Asoka through his missionaries under religious leaders, is an important factor. This not only facilitated the spread of Buddhism but also the spread of traditions and customs followed in the Magadha region, in particular, the creation of rock-cut edifices for dwelling as well as worship (Mitra 1971). It has been recorded that the Maharashtra region was under the religious emissary known as *Mahadharmarakhita* and slowly the region was filled with numerous religious edifices duly supported by people from all walks of life.

The use of rock outcrops, high cliffs in the river valleys, have been preferred for excavating the earliest settlements for religious purposes as indicated by examples at Barabar and Nagarjuni Hills (Bihar), western Maharashtra and Mahabalipuram (Tamil Nadu) (Fergusson and Burgess 1880). These rock-cut excavations probably started at Barabar and Nagarjuni Hills indicated by the examples of Lomas Rishi and Sudama Caves, the latter having inscriptional evidences of religious patronage it received. The Sudama Cave (Figs. 1 and 2) was the donation of Mauryan king Asoka (c. 273–236 BCE) for the Ajivikas sect, while the donor of the adjacent Lomas Rishi cave is unknown.

What probably started as a small-scale retreat for the religious mendicants in this part of India soon spread to other regions as

Fig. 1: General view of Sudama (left) and Lomas Rishi Caves (right), Bihar (Source : author).

Fig. 2: Inner view of Sudama cave, Bihar (left). Details of donor inscription by Asoka in Sudama cave (right) (Source : author).

well, wherever suitable rock media and locations were available. In particular, exploring various geological formations for excavation of religious settlements consisting of monasteries and *chaityagrihas* was soon mastered for various Buddhist settlements. A host of such settlements emerged at various locations in western Maharashtra, which also witnessed gradual development in the adaptation of natural rock formations, evolving different strategies to tackle such problems and also development of different styles in art and architecture. The earliest examples were clear reproductions of the existing wooden architecture, with even use of timber for ceilings, as clearly indicated by the surviving examples of rock-cut caves at Karla, Bhaja, Kondane and Bedsa. Soon, this permanent medium of religious settlements gained wide popularity and during subsequent time periods, large-scale excavations started, the culmination of which could be seen at Kailasa (Cave 16) at Ellora. Similarly, this popular medium spread to different parts of the country (Fig. 2) and examples could be seen at Kazhugumalai (Tamil Nadu) and Vizhinjam (Kerala).

Many of the earliest examples of rock-cut caves belonged to Buddhism, which also coincided with the period posterior to the royal edicts by Mauryan king Asoka at different strategic locations all over the sub-continent. The spurt in building of such monasteries and *viharas* also coincides with the spread of Buddhism. However, soon other religious faiths also adopted this medium, which can be seen from examples at Udayagiri-Khandagiri (Odisha), Udaigiri (Madhya Pradesh), Badami (Karnataka) and Mahabalipuram (Tamil Nadu).

Rock-cut edifices of western Maharashtra

It has been estimated that in western India alone, there are 1200 rock-cut caves of different religious attestations, which cover a time span of a little over 1000 years, from early 3rd to 2nd century BCE to the end of 13th century CE. This also indicates that the basalt rock formations in secluded locations that received plenty of water supply during the monsoon season, coinciding with the *varshavasa* of the Buddhists, was the most preferred medium for these excavations. Often, many of the standing examples of rock excavations clearly indicate the preference of high scarps overlooking a river valley. Some

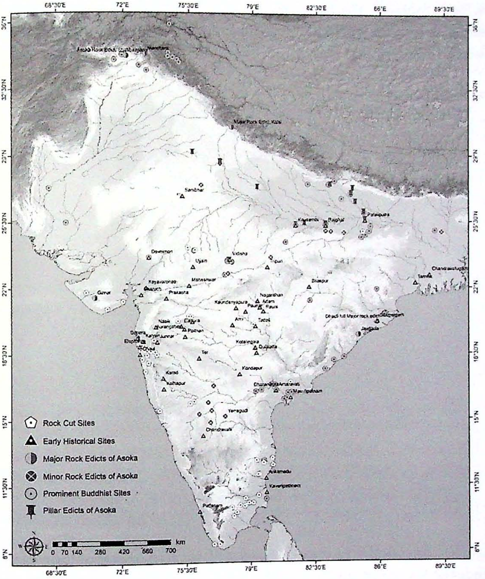


Fig. 3. Map showing the rock-cut sites in association with ancient cities (inscriptions of Asoka shown in relation with sites except Tamil Nadu) (Source : author).

of the earliest rock-cut excavations for Buddhist settlements in western India are Pitalkhora, Bhaja, Bedsa, Ajanta, Junnar, Kondane and Nasik (Fig. 4). These locations also indicate proximity to the early historic settlements nearby and were on an ancient trade route, which provided both sustenance as well as long-term support from people of different

walks of society. The donor inscriptions from many of these locations are a clear indication of the patronage they received from people of all walks of life.

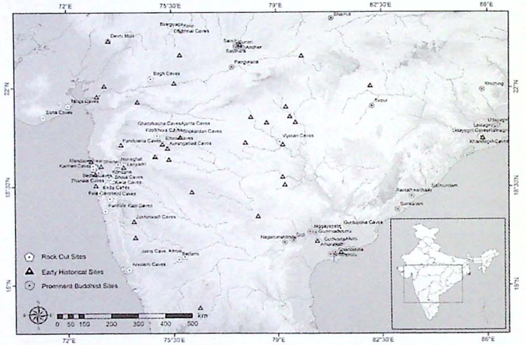


Fig. 4. Map showing the rock-cut sites of western Maharashtra along with early historical sites (Source : author).

The Buddhist rock-cut caves of western Maharashtra clearly indicate their proximity to early historic settlements such as Surparaka (Sopara), Jurnanagara (Junnar), Kalyana, Nasikya (Nasik), Nidhivasa (Nevasa), Pratishthana (Paithan) and Bhogavardana (Bhokardan) to name a few. At Ajanta, which hosts one among the earliest Buddhist establishments a historical site known as Lenapur, which can be seen nearly two kilometre upstream. Deshpande (1959) succinctly brings to light the two prominent trade routes (Fig. 5) of ancient India, which connected Pratishthana (modern Paithan), the capital of Satavahanas, one from Surparaka (Sopara) through Nasikya (Nasik) and passing through Pitangalya (Pitalkhora) and following more or less the modern Chalisgaon–Ellora–Aurangabad–Paithan while the other from

the northern India after passing through Ujjayini (Ujjain) reaches Mahishmati (Maheswar) and then splits into two routes, one reaching Bahal enroute Paithan via Pitalkhora, and the second also leading to Paithan through Ghatotkacha, Ajanta and Bhokardan (ancient Bhogavardana) (Deshpande 1959). This clearly explains the presence of large monastic establishments at Pitalkhora, Ellora, Aurangabad, Ghatotkacha, Ajanta, all of which are located on the ancient trade routes.

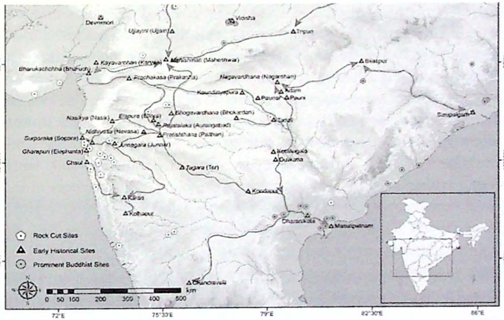


Fig. 5. Map showing the rock-cut sites of western Maharashtra along with early historical sites and ancient trade routes (Source : author).

It is interesting to note that some of these settlements area are also mentioned in the historical literature. For example, Pitalkhora finds mention in the Buddhist text *Mahamayuri*, as Pitangalya wherein the *yaksha* Sankarin was residing (Agrawal 1942). Pitalkhora is also identified with Petrigala of Ptolemy. Deshpande (1959) alludes that Pitangalya-Petrigala might have been a township on the Pratishthana-Bharukachchha route. The caves at Pitalkhora are obviously the outcome of the site being located on the trade route and hence attracted extensive

donations. It is also pertinent to note that Pitalkhora is strategically located connecting the Tapti valley in the west and Godavari valley in the east. Similarly, the Pandulena Caves at Nasik received extensive royal patronage by the Satavahanas as indicated by the inscriptions found here. It is also well known that Nasik is an ancient settlement, its antiquity dating back to the Chalcolithic period. Reverting back to the nature of donor inscriptions, examination of a few clearly indicates how people from different backgrounds and professions supported these religious settlements, either fully or even partially, for e.g. pillars, facades, roofs and complete monastic establishments.

The inscriptions were either chiselled on the rock surfaces directly (e.g. Cave 3, Pitalkhora) or on a smoothened surface (e.g. Cave 16 and 17, Ajanta). Instances of painted donor inscriptions are also noted from these caves, especially at Ajanta (Fig. 6). For example, the presence of two early inscriptions (Figs. 7 and 8), found from the pillars in Cave 3, records the gift by one Mitadeva of the Gadhika (perfumer?) family and the other by sons of Sanghaka, both hailing from Patithana (Pratishthana, modern Paithan). One inscription from Cave 4 mentions the gift of one Kanha (Krishna), the son of Samasa, of Dhenukakata (Dhanyakataka, modern Amaravati in Andhra Pradesh). The continuation of occupation of these caves during the Mahayana phase is attested by the painted figures of Buddha and Bodhisattva in Cave 3 along with painted records ascribable to 3rd to 6th centuries CE.

At Ajanta, which houses one of the finest specimens of Buddhist art and architecture, two monastic complexes were donated during the

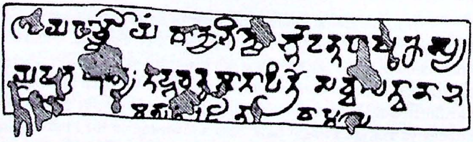


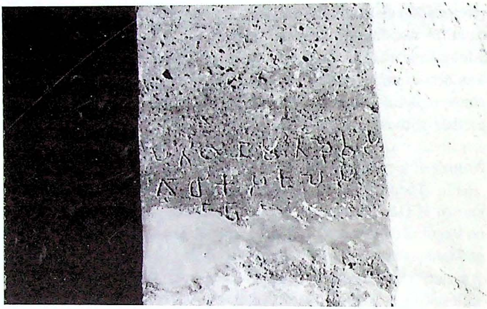
Fig. 6. Details of painted donor inscription, Ajanta caves, Maharashtra (Burgess and Bhagwanlal Indraji 1881)

reign of Vakataka king Harishena, belonging to 5th century CE. The Cave 16 was the donation of Varahadeva, the minister of Harishena, while Cave 17 was by Upendragupta, a feudatory of the same king. The best example of royal patronage was by the Satavahana rulers like Gautamiputra Satakarni, Sri Pulumavi and Queen Gautami Balasri, mother of Gautamiputra Satakarni at Pandulena Caves (Nasik).

Nature of Geological Rock Formations

The rock-cut caves were excavated in the volcanic formation known as Deccan 'trap', which is a part of massive volcanic eruption now estimated to spread over an area of 3.2 lakh square km in most parts of Maharashtra, Gujarat, Karnataka and also in Madhya Pradesh. The volcanic eruption belongs to upper Cretaceous in age and the thickness varies from 10,000 feet near Mumbai to 100–200 feet in Sindh, its northern limit (Wadia 1919). The average thickness of individual lava flows is around 50 feet, while the thickness has been noticed even up to 500 feet. The individual lava flows are often separated by thin layers

The pillar donated by the son of Sanghaka, from Pratishthana
Fig. 7. Details of donor inscription, Cave 3,
Pitalkhora caves, Maharashtra (Source : author).



The pillar donated by Mitradeva, a perfumer, from Pratishthana
Fig. 8. Details of donor inscription, Cave 3,
Pitalkhora caves, Maharashtra (Source : author).

of ash, scoriae, green earth and also by sedimentary beds, which are termed as 'inter-trappean' beds (Wadia 1919).

The composition of the trap is undifferentiated from one place to another and the only variation is observed in colour, which varies from greyish-green tint to perfectly black and its various shades (Wadia 1919). The flows which are more acidic in composition have colours of rich brown or buff while the red and pink tints are uncommon (Wadia 1919). The texture varies from '……fine-textured crypto-crystalline, almost vitreous anamesite, through all gradations of coarseness, to a coarsely crystalline dolerite' (Wadia 1919). The rock is also '….often vesicular and scoraceous the amygdaloidal cavities being filled up by numerous secondary minerals like calcite, quartz and zeolites' (Wadia 1919).

The geological studies carried out by the Geological Survey of India (GSI 2005) have concluded that the basaltic flows exposed in the area have been subdivided into four stratigraphic formations. Deccan traps comprising 'compound pahoehoe', 'Aa' and megacryst basaltic

flows and younger intrusive belonging to the Lower Ratangarh, Upper Ratangarh, Ajanta and Chikli Formations of Sahyadhri Group of Upper cretaceous to Lower Eocene age are exposed in the area. The area is occupied by the Deccan Trap basaltic lava flows belonging to Upper Ratangarh Formation of Sahyadari Group. Five flows were delineated in the area between altitudes 620 and 728 m. The upper two are of 'Aa' type, while the lower three are compound 'pahoehoe' flows.

The lower three pahoehoe flows are intervened by a layer of red/green bole layer.

Flows IV and V are 'Aa' type flows and are hard, massive and compact. Flow IV varies in thickness from 10 to 14 metre while the top contact of Flow V could not be delineated. In terms of understanding the geology of the caves, Flows III and II are important as they are excavated in these flows. Both Flows III and II are pahoehoe types and form the major portion of the scarp at Pitalkhora. Flow III consists of 14 pahoehoe-type units, the middle portion being massive and the lower units of this flow forms part of the top portion of the excavated caves. Flow III also forms part of the scarp with lot of negative slopes. Flow II consists of eight pahoehoe type units and the contact between Flow II and III is exposed 1–2 metre above the floor of caves. Flow II also forms part of the lower portion of scarp and extends up to the river base.

The geological investigations carried out by GSI have identified several factors for the damage caused to the caves (GSI 2005). The main causes of deterioration of the caves have been discussed below in order to understand the conservation and preservation initiatives.

'Slabbing' Effect Due to Which Inverted Step-like Feature Develops on the Façade of Caves

This effect of deterioration is particularly observed at the Pitalkhora caves, wherein the earliest attempts of rock excavation were carried out. Due to the slabbing effect, the individual rocks are loosened by the intersection of three sets of joints, one sub-horizontal and usually two sub-vertical planes. The façade keeps on receding due to the continuous falling of rocks due to which the exterior portion of the ceiling becomes higher than that of interior portion, thus producing an

inclined cross-section of the ceiling. The falling of rocks from the lower portion induces loosening of rocks above them and this phenomenon continues further, thereby leading to receding of façades.

Fig. 9. Falling of rocks from the ceiling of Cave 1 and further development of cracks (Source : author)

The best example of this phenomenon could be observed in Cave 1 at Pitalhora (Fig. 9), wherein the falling of rocks on the floor indicates the real threat posed due to this effect. The evidence of continuous falling of rocks could be further observed from the cracks developed between the still intact portion of the rock mass, which is further aggravated by water seepage and vegetation growth. Cave 4 is also affected due to slabbing. The preventive steps adopted by the ASI to provide basalt masonry props (Fig. 10) to withhold the deterioration process along with suitable drains to divert water away from the façade.

This phenomenon is noticed in many caves at Pitalkhora (Fig. 11) and the best examples can be seen at Caves 1, 4 and 6A, wherein a negative slope has been already created due to the creation of overhang. The receding of scarp, which is more prominent in the Pitalkhora caves,

Fig. 10. Providing basalt masonry pillars to support the weak portions of Cave 1, Pitalkhora (Source : author)

Receding of Scarp, Creation of Overhang Leading to Development of Cracks along Unit Contacts due to Lack of Support

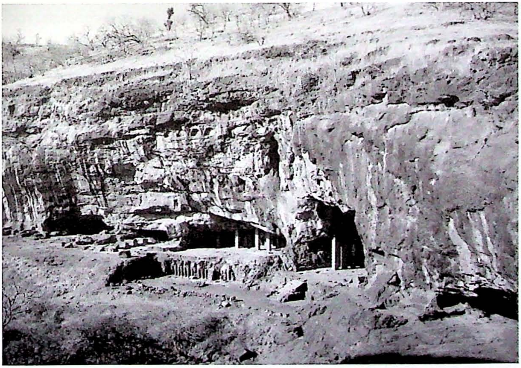


Fig. 11. Receding of façade, Pitalkhora caves (Source : author)

is due to the slabbing effect. The falling of rock blocks, continuously aggravated by water seepage, creates receding of the façade. The entire façade of Cave 4 has disappeared for except a few portions at the top, preserving remains of the *chaitya*-arched decoration. This is a unique situation due to rock formation and the choice of location for excavating the caves for creating dwelling and worship by the Buddhists. The lesser knowledge of rock formations in this region by the excavators is another reason that led to locating the caves at the weaker zones.

Construction of Caves Coinciding with the Joints of Two Lava Flows

As the lava flows occurred in differential timeframes varying in thickness, often less than the height of the caves excavated across western Maharashtra, it is always bound to cut into two or three lava flows having unit contacts (Fig. 12). At Pitalkhora, the lower three units of Flow III form the upper portion and ceiling of many of the caves, while the contact between Flows III and II is exposed 1–2 metre above the floor level of some of the caves. The red/green bole layers mark the approximate zone between these two lava flows. They are extensively exposed in Caves 1, 3, 5 and 9. Along the lava flow unit contacts, rock fall often happens, as the excavators disturbed the equilibrium that had been set since millions of years. These unit contacts are also the main medium through which water seepage occurs across different lava flows and once a channel is cut across or opened, the seepage aggravates and penetrates different layers.

The unit contacts could be easily discernible at many caves in western Maharashtra. At Ajanta, one of the effects of cutting across different lava flows caused the fall of a portion of the ceiling in Cave 4 (Fig. 13).

The excavators of the cave immediately understood the formation processes and readjusted the ceiling. The positive impression of the underlying pahoehoe flow was preserved in the lower portion of a later lava flow, which is exposed by the falling of the ceiling in antiquity. The ropy nature of the lava flow is witnessed here. The deterioration and detachment of individual rocks at the unit contact of two or more units of lava flows occurs easily and is a major concern of

Fig. 12. Different lava flows and separated by unit contacts, Ajanta (Source : author)

Fig. 13. Exposure of unit contact in Cave 4, Ajanta (Source : author)

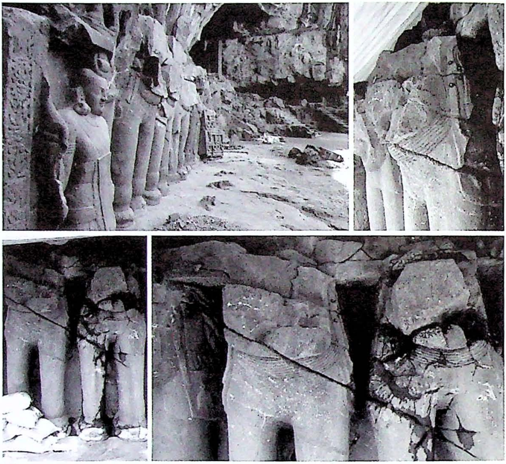


Fig. 14. Deterioration of elephant statues, Cave 4, Pitalkhora (Source : author)

the conservators. The deterioration is further aggravated by water action, which seeps into the crevices and causes micro-vegetational growth. The crevices gradually widen and lead to detachment, causing rock fall. The examples of such deterioration are again explicitly witnessed in Caves 4 and 5 in Pitalkhora caves. The row of elephants carved at the lower façade level has been badly affected and the front portion of head and trunk is missing in all of them (Fig. 14). Similarly, rock fall could be seen in the façade of Cave 5 due to this effect (Fig. 15).

Development of Cracks along the Valley Relief Joints

The valley relief joints are generally found parallel to the valley face. The valley relief joints could be noticed at several places all along the valley such as to the right of Cave 8, to the left of Cave 4, near Caves

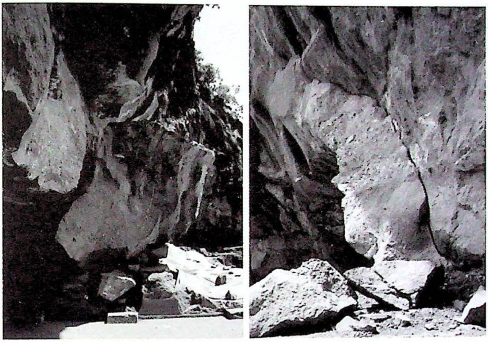


Fig. 15. Rock fall, Cave 5, Pitalkhora (Source : author).

11, 12 and 13 at Pitalhora. The section exposed due to rock excavation near Cave 8 at Pitalkhora clearly shows a diagonal crack indicating the valley relief joint (Fig. 16). The entire rock mass above this crack tends to move down depending upon the support at the base of the valley. The rocks also loosen all along the valley relief joints and cracks gradually develop, which may ultimately fall. Similarly at Ellora Caves, at many locations, especially to the left of Cave 16 (Kailasa) and right of Cave 10 (Visvakarma cave) the valley relief joint could be observed. The excavation of caves exposes these valley relief joints, and at a few locations, it becomes active and may cause further deterioration and detachment of rocks.

Deterioration of Red / Green Bole Intermediary Layers due to Its Soft Nature

The red/green bole intermediary layers mark the approximate boundary between different lava flows and also indicates a lull in the volcanic activity (Fig. 17). They are also known as 'bole beds' in the Deccan Traps and may vary in colour like red to brown, green, purple and grey (Ghosh *et al.* 2006). These layers are formed due to the

Fig. 16. Valley relief joint near Cave 8, Pitalkhora (Source : author)

weathering of basalts, thereby indicating probable hiatus in the lava flows and a few of them are indicative of 'incipient palaeosols' (Ghosh *et al.* 2006). The green bole is susceptible to weathering due to its weak nature and crumbles when it comes in contact with moisture.

The reddening of these types of formations is particularly interpreted as due to the action of chemical and thermal processes that they had undergone. The green bole layers gradually weather and get converted into soil, thus endangering the caves (Fig. 18). At Pitalkhora, Cave 9 is the most affected one due to the complete weathering of green bole layer, approximately from the middle portion up to the floor level. Considerable portion of Caves 1 and 5 at Pitalkhora caves is also affected due to the deterioration of these layers, while in Cave 3 evidence for filling up the wall portion with cult basalt blocks is noticed all along the green bole layer.

The evidence of ancient conservation by the original occupants could be witnessed at several locations in Cave 3, Pitalkhora. The green bole layer runs continuously from Caves 1 to 9, with varying thickness,

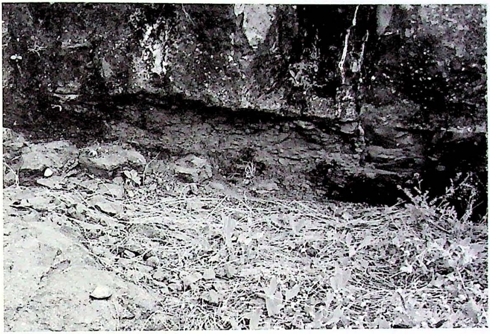


Fig. 17. Red bole layer near Karla Caves, Maharashtra (Source : author)

with the maximum thickness noticed in Caves 5 and 9. That the necessity arose to prevent the collapsing of rock due to the deterioration of green bole layer was felt and hence the original basalt rock blocks were cut and fashioned to fill the gaps along the walls of Cave 3. The wall surfaces wherever the green bole layer run was properly chiselled to accommodate the basalt rock blocks. Subsequently, these repaired wall surfaces were used for the murals (Fig. 19). Similarly, even the deformations on the floor of Cave 3 were filled in by cutting the proper basalt stones and fitting them according to the requirements. This is a clear indication of the strategies adopted by the original occupants to overcome the deformities in the rock formations at Pitalkhora. This may also be seen as an attempt to understand the geology of the region and also as coping up with the situation as lot of efforts were already taken on excavating the massive and elaborately decorated caves. Similar repairing of deformities in the rock formation can also be seen on the right triforium of Cave 10 at Ajanta, which is slightly later in date when compared to Cave 3 of Pitalkhora.

The ASI has also adopted different strategies to control the weathering of green bole layer in Pitalkhora caves, particularly during the monsoon season, which aggravates weathering due to moisture retention. The experimental studies indicated that if the exposed green bole layers are concealed using cut-basalt stone blocks, the weathering activities could be considerably arrested. This was the same technique used by the ancient conservators, particularly at Pitalkhora caves. In Cave 1 of Pitalkhora, ASI used the dressed and properly chiselled and shaped basalt stone blocks of proper sizes to conceal the green bole layers, before raking out the loose and weathered layers (Fig. 20). This preventive step has arrested further weathering.

Issues Related to Water Seepage and Control of Surface Water Flow

The excavation of caves on the rock scarps and valley faces has not only exposed the original geological rock formations, but also helped in exposing the voids and joints and served as an avenue for

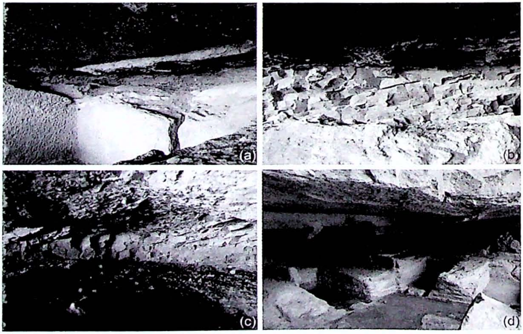


Fig. 18. (a) and (b) Green bole layer, Junnar Caves, Maharashtra; (c) Red bole layer, Junnar Caves, Maharashtra; (d) Green bole layer, Pitalkhora Caves, Maharashtra (Source : author).

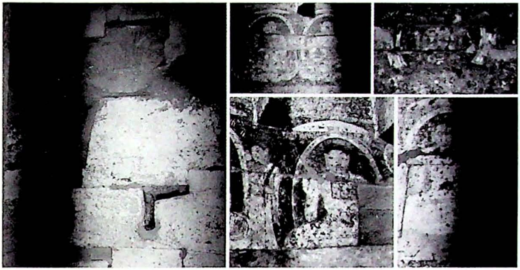


Fig. 19. Instances of ancient conservation of rock deformities, Pitalkhora Caves, Maharashtra; Stone blocks were cut and used to fill suitably prepared wall portions and painted with murals during the later period (Source : author).

the flow of water. The water flow on the hill and mountain tops finds its way into voids, gaps and inter-trapean joints and ultimately emerge from the valley faces and scarps. Wherever the excavation of caves occurred on the flow path, the water oozes and emerges from inside the caves. The action of water is detrimental for the painted surfaces as they considerably damage the painted layers, resulting in their ultimate loss. Further, the continuous water flow over the sculpted façade of caves considerably damages and deteriorates them.

It has been observed that the best way to mitigate the damage caused to the painted surfaces, façades of caves is to divert the water flow away from the caves. Further, in certain caves in Ajanta and Pitalkhora, it has been observed that the water seepage occurs right inside the caves from the ceiling due to the exposure of voids and joints originally present. In order to mitigate the flow of water inside the Cave 1 at Ajanta, a concealed ceiling drain has been constructed, which collects the water flow and diverts it outside the cave.

Fig. 20. Concealing of green bole by dressed basalt stones, Cave 1, Pitalkhora (Source : author)

The construction of contour drains (Fig. 21) and surface water drains (Fig. 22) has been a major factor in mitigating water seepage inside and on the façade of the caves. At Ajanta, at least four levels of contour drains have been constructed to divert the flow of water and two levels of surface water drains to divert away the water flow from even the surface. It has been observed that nearly 70% of water seepage was reduced after the construction of surface water drains alone. Similarly, the façades of Pitalkhora caves have undergone deterioration due to the continuous ingress of water over its surface. The geological investigations at both Ajanta and Pitalkhora suggested providing for surface drains that can suitably divert the water flow away from the caves (Fig. 23). The location and contour of these surface drains were also decided based on these studies and the ASI successfully provided additional surface drains on the hill tops, which proved to be highly beneficial in reducing water seepage.

Future Conservation Methods and Mechanism

The ongoing discussion clearly demonstrates the methodology adopted for the better conservation and preservation of rock-cut structures

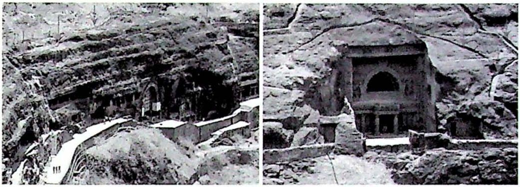


Fig. 21. Contour drains, Ajanta caves (Source : author)

of western Maharashtra. In order to adhere to universal standards, till recently, the conservation initiatives were proposed, discussed and analysed in detail by a panel of experts consisting of international and Indian experts before execution. The detailed geological studies of the caves at Ajanta, Ellora, Pitalkhora and Aurangabad have helped in formulating future strategies. The future conservation methods have to follow the time-tested and decades-long mechanism of finding suitable techniques for arresting the water seepage into the caves, by evolving scientific techniques and methods. The time-tested mechanism has always indicated the importance of arresting water seepage, thereby decelerating the deterioration process.

Further, scientific studies are necessary to evolve suitable binding materials and consolidating agents to strengthen the weakening basalt layers. The necessity of evolving reversible agents of strengthening is deeply felt while conservation of caves, in particular, wherever sculptural and decorative panels and inscriptions are present. These activities will be supplemented by a suitable monitoring mechanism by the custodians of the heritage structures, in order to understand the deterioration processes in a better manner. The monitoring mechanism aided by a suitable GIS-enabled technique will enormously help in the decision-making process and designing better strategies based on past experiences and conservation methodologies.

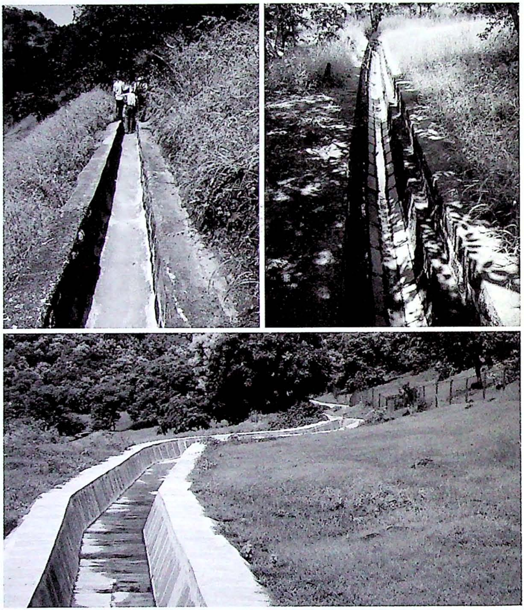


Fig. 22. Surface water drains, Ajanta Caves (Source : author)

Participation of Stakeholders Including Local Communities in Conservation Initiatives

It has often been felt that the local communities play a major role, as they are the chief stakeholders, who have been residing adjacent to these heritage structures since time immemorial. The local communities view these heritage structures as a main source of livelihood in many aspects. This often leads to a level of conflict between them and the

Fig. 23. Surface water drain, Pitalkhora; Before (left), After (right) (Source : author)

administrators of these structures. The restrictions imposed for the better management and security of these caves are also seen as a challenge for their free access. The involvement of communities who often traverse the caves for access to their livelihood resources is an important component in the success of conservation and preservation initiatives. A sense of belonging among the locals towards the heritage, which often is inscribed in World Heritage List needs to be developed, as they impart this belief to the future generations, who ultimately will be the custodians of this heritage. The ASI organises a series of awareness programmes and involves the local communities in such events to make them understand and also to participate in the overall management of these heritage structures as well. It is also felt that the local communities participate in a major way in the actual conservation and they form the workforce in the execution of such activities. Continuous participation in the conservation work fine-tunes their expertise, which adds to the perfection of conservation methodologies. This participation also helps to instil confidence among the locals as they actually participate in the conservation initiatives with the administrators and feel proud of their heritage.

Conclusions

A brief discussion on the understanding of the rock excavations for religious purposes, its origin, evolution and introduction in western Maharashtra has been presented in this paper. It has been understood that these excavations gained prominence in western Maharashtra after the introduction of Buddhism during the 3rd to 2nd centuries BCE. Initially,

the early excavators could not understand the geological formations and basaltic flows, which resulted in excavating faulty layers, leading to deterioration of caves that resulted in their ultimate abandonment. Attempts by these early occupants to repair and conserve the rock deformities could also be noticed at places like Ajanta and Pitalkhora. However, the conservation of these rock-cut caves is a stupendous task as the deterioration process set in when the original equilibrium was disturbed while excavating them. The ASI has adopted different strategies to study and analyse the problems related to preservation and adopt suitable indigenous techniques to mitigate them. The mitigation steps include preventive measures of providing supports and props to arrest the destabilised portions, providing drains on the surface as well as different contour levels to divert the water flow, which is a major cause for deterioration. The conservation and preservation is an ongoing process. Documentation and research strategies are adopted to understand them with respect to the latest technologies and suitable steps are initiated to mitigate the deterioration process.

References

Agrawal, V.S., 1942. The Geographical Contents of Mahamayuri. *Journal of U.P. Historical Society XV, Part II*: 28, sr. no. 42.

Bisht, R.S. 2014. How Harappans Honoured Dead at Dholavira, in *Sindhu-Sarasvati Civilization: New Perspectives*, (Nalini Rao Ed.), pp. 252–305. New Delhi: D.K. Printworld (P) Ltd.

Burgess, Jas and Bhagwanlal Indraji. 1881. *Inscriptions from the Cave Temples of Western India.* Bombay: Archaeological Survey of Western India, Government Central Press.

Deshpande, M.N., 1959. The Rock-cut Caves of Pitalkhora in the Deccan, *Ancient India* 15: 66-94.

Dikshit, M.G. 1942. *The Origin and Development of the Buddhist Settlements of Western India.* Unpublished Thesis. Bombay: Bombay University.

Fergusson, J., and J. Burgess, 1880. *Cave Temples of India*. Delhi: Oriental Books Reprint Corporation (1969 rep.).

Ghosh, Prosenjit and Mohammed Rafi Sayyed, and R.M. Islam, S. Hundekari, 2006. Inter-basaltic clay (bole bed) horizons from Deccan traps of India: Implications for Palaeo-weathering and Palaeo-climate during Deccan volcanism. *Palaeogeography Palaeoclimatology Palaeoecology*, 242: 90–109. 242. 10.1016/j.palaeo.2006.05.018.

GSI 2005. *Geoscientific Studies for the Conservation of Pitalkhora Caves* (2005) A Report submitted by Geological Survey of India to Archaeological Survey of India.

Mitra, D. 1971. *Buddhist Monuments*. Calcutta: Sahitya Samad.

Prabhakar, V.N. 2015. A Survey of Burial Practices in the Late / Post-Urban Harappan Phase during the Second and First Millennium BCE. *Heritage: Journal of Multidisciplinary Studies in Archaeology 3*: 54–83.

Sinha, Manohar (Ed.) 2010. *Geoscientific Studies for the Conservation of Ajanta Caves*. New Delhi: Archaeological Survey of India.

Sinha, Manohar (Ed.) 2011. *Geoscientific Studies for the Conservation of Ellora Caves*. New Delhi: Archaeological Survey of India.

Wadia, D.N. 1919. *Geology of India*. Toronto: The Macmillan Company.

Wilson, J. 1853. Second Memoir on the Cave Temples and Monasteries and Other Ancient Buddhist, Brahmanical and Jaina Remains of Western India. *Journal of Royal Asiatic Society* (Bombay Branch) IV: 357–360.

13. Management of Epigraphical Heritage as Gleaned from Medieval Inscriptions

S. Rajavelu

Abstract

Archaeological materials, inscriptions, literature, art and architecture provide valuable information to write a coherent history of India. It is no exaggeration to say that nearly 2500 years of Indian history is mostly reconstructed with the help of the written source material, namely, the epigraphs. The epigraphs are found abundantly from the Mauryan times. They were copied and re-issued in the later periods. The famous Allahabad stone pillar, which has the inscription of Samuduragupta, has an earlier inscription of Asoka of 3rd century BCE. Due to climatic conditions and shifting in the later period, this stone column was damaged. This pillar has the inscriptions of Asoka, Samudragupta's inscription of 4th century CE and Jahangir's inscription of the 17th century. The art of preserving the heritage property also has a long history. Inscriptions provide glimpses into the history of preservation and conservation of epigraphical records. The importance of re-engraving of old inscriptions on the temple walls at the time of renovation as a means of preserving the earlier records has been narrated in several inscriptions of Tamil Nadu. The Pallankovil copper plates of the Pallava king Simhavarman of 6th century CE is a copy of the original record, re-written in the late characters in the 8th century. We have no information on the original copy of this copper plate. It is possible that the original plates were destroyed either knowingly or unknowingly, and again it was re-engraved in the succeeding period. Similarly, inscribing on the old inscriptional surface is not uncommon in India. This paper focuses on the management of epigraphical records as referred to in the medieval inscriptions of Tamil Nadu.

Keywords: Tamil Inscriptions; Epigraphical Heritage; Traditional Record Management; Epigraphy

Introduction

The art of preservation of epigraphical records as well as dilapidated temples and structures and broken sculptures is not new to the Indian cultural tradition. The tradition of conservation of heritage started at least from the post-Asokan period. In Tamil Nadu, most of the temples of the pre-Pallava period were made of perishable materials such as bricks, mortar, wood, clay and metal, as indicated by the inscription of Mahendravarman I of the Pallava dynasty. There is a reference in the Saṅgam literature about the construction of 70 temples by Ko-Chengannan, a Chola king on either side of the banks of river Kaveri in the Chola country for the deity Gauri (Parvathi), gods and goddesses (EI 15: 47)[1]. None of these temples is in existence in their original condition and they were perhaps modified in the later period. Originally, these temples were mostly built with the perishable materials.

The early Pandya and the Pallava rulers, after the 4th or 5th century CE, introduced a new form of temple architecture known as rock-cut temples structural temples in stone, which were unknown previously in the Tamil country. An inscription of Mahendravarman I at Mandagapattu records that the king Vichitrachitta (Mahendravarman I) scooped the temple *Lakshitayatana* for the Gods Brahma, Isvara and Vishṇu without the use of bricks, timber, metal and mortar (EI XVII: 17). Around 4th or 5th century CE in Tamil Nadu, the medium of perishable materials for constructing temples were replaced by stone materials in some contexts to create long-lasting temples. These temples were also maintained, and regular repairs were also undertaken in the succeeding periods. This practice of preserving the temples as well as sculptures and inscriptional records was followed by rulers throughout the historical period.

Historically inscriptions on stone and copper plates were the means of creating lasting records as against recording them in

1. The Anbil copper Plates, Verse. No.13. *Epigraphia Indica* (here after *EI*) Vol. 15, p.47. Bakthi saints Thirumangai Azhwar and Appar record about the construction of temples along the banks of the river Kaveri by this king, in their poems.

perishable palm leaves. Temples in the medieval period indeed played a vital role in the village administration and they served as platforms for managing local affairs of the people as well as the state. The temples as ideological centres linked the people, kings and the state through which the state could control the local bodies and the people. The state took several welfare measures through these religious institutions. The oral orders of the kings and all transactions related to village and temple were finally engraved on the walls of the temple as a permanent record-keeping procedure. Hence, the preservation and conservation of religious edifices and the inscriptional records undoubtedly were the prime duty of the state as well as officers and the people and more particularly the local community. Quite a number of inscriptions in Tamil Nadu focus on the preservation of temples, but old inscriptional records were defaced as well. Most of the brick temples were replaced with the stone materials during the medieval period. Whenever the inscriptions were defaced or damaged, they were again re-engraved permanently on the base of the *vimana* of the temple. This reveals the care provided for the preservation of the old documents as part of the record keeping practices.

A stone slab inscription of Pallava king Nripatuṅgavarman dated to 24th regnal year (893 CE) engraved at Tirukkodikkaval was damaged according to a later inscription, which says *'munnivāsagam veṭṭikkiḍanta tanikkallāl ubaiyōgam illāmaiyāl'*. This old inscription (*paḻaṅkaṟpaḍi*) was again re-engraved with the details of donation. During the reign of Rajakesarivarman, of the Chola period, the defaced stone slab inscription was re-engraved again on the wall of the *vimana* of the Tirukkodisvara temple at Tirukkodikkaval (SII XII, 78). Another inscription from the same village records the re-engraving of another old, defaced stone-slab inscription by the king Maranjandaiyan, the Pandya king in his 4th regnal year (866 CE). It mentions that the original stone slab on which the inscription had been engraved was damaged and therefore had to be replaced (SII XIV, 3). The content of the old inscription was re-engraved on the wall of the *vimana* of Tirukkodikkaval temple (SII XII, 78).

During the time of Varaguṇa Maharaja, the Pandya king, the temple authorities found another isolated stone with a defaced inscription within the temple complex. In order to preserve the old record, they re-engraved the inscription once again to keep the charity forever on the wall of the *vimana* of the temple at Tirukkodikkaval (SII XIV, 4). Collectively, the available evidence points that the temple of Tirukkodikkaval was once a brick structure, and during the time of Pandyas, the brick temple was converted into a stone edifice. The inscriptions on the loose stone slabs of the brick temples were defaced and these records were again engraved on the stone walls of the *vimana* in order to preserve the records as well as the charities of the early period.

The practice of preserving old records was continued by the Cholas in the medieval period. An interesting information from Tiruvidaimarudur of Thanjavur district refers to the order of the king for the preservation of old records (SII III, 124). The inscriptions belong to the 4th regnal year of Rajaraja I, corresponding to 989 CE, and refers to the assembly of the village, the trustees and other officers of the temple; they assembled in the theatre hall of the temple and examined the assets offered as gifts, which were mostly gold. During this examination, they found some of the stone inscriptions bearing the details of the gifts being placed in the underground cellars. They immediately issued an order to the temple authorities to recover all the stone slabs from the underground chamber and made fresh copies of them. Further, the king ordered re-engraving all the old inscriptions on the walls of renovated temple permanently. The old inscriptions are dated from the time of the Pallava king Nandivarman III onwards.

In addition to the new temples built by Rajaraja I, many temples were also renovated during his period. An inscription of Rajaraja I from Kurralam near Tirunelveli in Pandya maṇḍalam is an interesting example. It records that the temple of Kurralanathar had become dilapidated, and king Rajaraja I ordered to renovate the entire temple. While pulling down the stones of the old temple, it was noticed that the inscriptions were written in *Vatteluttu* script. Then king Rajaraja I ordered that the *Vatteluttu* inscriptions be re-inscribed again

on the walls of the newly renovated temple in Tamil script (ARE 455 of 1917). It shows that the king and the people of those days realised the importance of preserving the documents, which is nothing but a kind of preservation as undertaken in the modern archival study.

Siddaliṅgamaḍam is a small village in Tirukkovilur taluk of Villupuram district in Tamil Nadu. The Siva temple in the village was renovated during the reign of the Chola king Kulottunga I. The architect of the temple noticed inscriptions on the walls of the old temple and ordered the temple authorities to re-engrave all the inscriptions. This kind of preservation activities was adopted by almost all the dynasties in Tamil Nadu to preserve the defaced inscriptional records. An inscription from Tiruvallam in Vellore district refers to the re-engraving of Rastrakuta king Krishna III's inscription of 9th century CE. Nearly two centuries later, it was once again re-engraved by Kulottunga I, the Chola king (ARE 24 of 1910).

The royal throne, local bodies and the temple authorities were responsible for looking into the matter of preserving the living temples as well as the inscriptional records in the villages in the medieval period. Kings, queens and the individual officials in the medieval period of Tamil Nadu encouraged the protection of temples periodically by the way of *kumbabishegam*. Sembiyan Mahadevi, Loga Mahadevi and other Chola queens took keen interest to replace many of the brick temples with stone structures. Particularly, Sembiyan Mahadevi, the queen of Ghandradhitya and mother of Uttama Chola, made immense contribution. Many temples in the Chola region from the time of Madhurandhagan Ghandradhitya to Rajendra I were converted by her into stone temples.

They also newly installed and consecrated images of many gods and goddesses in the temples. Many temples such as Kailasanatha temple at Sembiyan Mahadevi, Umamahesvarar temple at Konerirajapuram, Tirukkurangaduthurai temple at Aduthurai, Tirukkodisvarar temple at Kuttalam, Agasthisvara temple at Ananagur, Achalesvara temple at Tiruvarur, Maranatha's temple at Mayiladuthurai, Sivalokam Udaiyar temple at Tiruvakkarai, Virudagirisvara temple at Vriddachalam and Masilamanisvara temple at Tirumullaivayil near Chennai have been

converted into stone structures (*karrali*) by the queen Sembiyan Mahadevi I.

The inscription of Kulottunga III at Sivalayam records an interesting information regarding the reconstruction of the temple as the original stone slabs bearing inscriptions were in a worn-out condition. The entire walls were pulled down and the old inscriptions were re-engraved on the walls of the renovated temples (ARE 47 of 1913). Another inscription from Munnur in Villupuram taluk and the same district records that the *Tānattār* and the *Urār* of several villages noticed the stone inscriptions in the temples of Avur Kurram in Nittavinotha valanadu were purposefully destroyed and the matter was informed to the local chief Udaya Perumal Chola konar. These inscriptions are important since they recorded tax-free land donations to several temples. Due to destruction, the day-to-day *pūja* activities were affected in these temples, and hence, the officials took care to re-engrave all the inscriptions as they existed in the original documents of the concerned temples. They were re-engraved again on the walls of temples according to the order of that official. It shows that the local authorities took responsibility for the preservation of epigraphic documents (SII VIII, 207).

The state and the local bodies frequently renovated the temples and conducted *kumbābishēgam* (consecration). There are several inscriptions referring to the natural calamities that affected temples as well as the village settlements. An inscription from Tirumalapāḍi dated to the reign of Rajaraja III (1223 CE) refers to the destruction of an entire village and the temple by sudden floods in the Kaveri river. Edirili Perumal Muvendavelan, an official from the Chola officialdom, rushed to the spot and saved the people from the flood and ordered the local authorities to replace the entire temple complex on an elevated area and constructed additional shrines and *mandapa* (Thiyagarajan 2017). Another inscription refers to the provision of land near the bank of Kollidam River for forming a grove of trees to stop the flow of water in the river (ARE 79 of 1920). Evidence for these kinds of philanthropic activities could be seen in several inscriptions of South India and they convey the efforts to preserve our heritage in the Chola period.

The preservation of temple properties continued during the Vijayanagara period too. The temple in Srirangam was frequently affected by heavy floods. An inscription of Sadasivaraya dated in Saka 1467, corresponding to 1546 CE, records a heavy flood, which affected the city as well as the temple of Srirangam. Nalantigal Narayana Jiyar of the temple ordered the local authorities to raise the bunds on the banks of Kaveri and planted reed (*Cyprus rotundas*) on the northern bank to control the water flow in the river. He also removed the mud and sand on the southern bank channel Chindamanai, which was dug during the Chola period to divert the heavy flood in the river Kaveri (EI XXIX: 70 ff). Water-controlling device (*yantra*) was also been installed on the bank of the river near Anaikattan Karai. This inscription is a significant one since it records a water-controlling device in the Chola period.

Discussion

As stated above, the preservation of historical documents, renovation of temple complexes and preservation of heritage monuments were given importance by the state and the society of the medieval period. The age-old practice of preserving the inscriptional wealth and the historical monuments in the modern parlance may be treated as conservation. Sincere and devotional approach was taken by the state as well as the local officials to preserve historical documentation, be they in the form of stone or perishable materials. Palm leaf or *bhurja patra* manuscripts are another kind of writing materials used in India. They were periodically recopied, maintained and preserved.

The Velvikkudi copper plate clearly indicates that the documents were preserved for several generations. It is believed that the Chola king Rajaraja I recovered the age-old Devaram hymns written on palm-leaf manuscripts from the store house of Chidambaram temple and earned the title 'Tirumuraikaṇḍa Cholan'. The copper plate inscriptions have also been rewritten for the purpose of preservation. For instance, the Pallankovil copper plates of the Pallava king Siṁha Vishṇu of 550 CE are a copy datable to the 8th century CE. The palaeography of the charter clearly indicates that this copper plate was again rewritten around the 8th century CE.

This kind of preservation of heritage monuments and inscriptional wealth was continued by temple trusties and district collectors till the 20th century. Many temple authorities and district collectors took interest to preserve the monuments as well as historical documents. Before undertaking conservation and renovation, the concerned temple authorities wrote letters to the Archaeology Departments to seek their help for copying inscriptions.

From the inception of epigraphy branch of the Archaeological Survey of India (ASI) in 1887, the officers copied inscriptions every year and the text appeared in the *Annual Report on Indian Epigraphy.* Estampages have been prepared *in situ* and photographs of the same have been documented. The estampages of the inscriptions nearly as old as 135 years are being preserved in the Mysore office, systematically numbered and arranged year-wise. This is a traditional way of preservation was introduced by the first epigraphist of ASI, Dr. E. Hultzsch, who did a commendable job.

From the reports, it is known that the epigraphists toured every year at the invitation of the temple authorities as well as district collectors and copied the inscriptions covering the neighbouring areas. At the same time, they also reported the pathetic conditions of many of the temples, which were demolished without taking any care of sculptures and inscriptions of the medieval period. Such information is reported in the introductory notes of the Annual Report on Indian Epigraphy.

For instance, the district collector of Thanjavur district wrote a letter to the authorities of Tiruviḍaimarudūr temple and stopped the renovation and demolition work and made arrangements to copy all the inscriptions in the temple. However, there are references on the destruction of monuments without informing the concerned officials. Many such instances were reported in the Annual reports of the ASI. The Government Epigraphist of the ASI, when visited the village of Alagapputtur in Kumbakonam taluk, witnessed the pathetic condition of the temple. The temple was completely pulled down except the *adhistana*. Beautiful sculptures and all historical inscriptions were destroyed during the renovation work. Though the collector as well as

the temple trustees wrote a formal letter to the government, before the arrival of the concerned staff, the entire temple was demolished without following the preservation and conservation methods. Innumerable inscriptions and beautiful sculptures and temple components have been lost as the temple authorities did not know their heritage value. After the independence of India, the destruction of the heritage resources in the temples became more common in the name of *kumbābishēgam* or renovation. This was due to lack of policies and awareness on conservation at various levels.

Several inscriptions on the temple walls in Tamil Nadu have been destroyed due to white washing, chemical paintings and other kinds of treatments. The pioneer epigraphist of India, Dr. E. Hultzsch, visited Viriñchipuram temple in Vellore district in 1887 to copy a few inscriptions on the walls of the temple. He found that all the inscriptions were covered with thick *sunnam* (lime wash), which affected the visibility of the inscriptions. He scraped the entire white wash of the wall and copied all the inscriptions. But the temple authorities allowed him with the condition that after copying the inscriptions, he should put back *sunnam* (lime wash) again on the same wall (ARE 1887: 3). At present, the government of Tamil Nadu, on the advice of Archaeology Department, sent notifications to the temple authorities to ban white washing and painting on the stone structures of the temples. A recent notification of the Hindu Religious Endowment Department says that before making any conservation work in the temple, a committee consisting of officers of traditional conservation, archaeologists and epigraphists would visit the temple and on the basis of their recommendations, they would move further for conservation.

Since such codes of conservation were not framed and disseminated earlier, some of the inscriptions and structures have been lost. It is heartening to note that now initiatives are taken for the conservation of valuable historical resources. However, more concentrated efforts have to be undertaken to prevent further destruction of our heritage. To preserve our heritage, serious measures should be adopted by the government as well as the temple authorities, district authorities and local bodies. These stakeholders, the local people and

the administrators should be taught about the importance of heritage periodically with the support of experts so that they can become guardians of their own heritage. The village people should be educated about the importance of their heritage monuments and local history. Conducting heritage walk programmes in the remote places with historical temples with a focus on the common folk is very important. Creation of heritage clubs in the villages would also prove worthy in saving our heritage. The government should also initiate public awareness programmes at the village level. Many inscriptions on the temple walls now have disappeared due to vandalism or natural phenomena. Hence digitisation of all the inscriptional estampages, which are housed in the ASI office in Mysore, is needed. Both state and the centre have to think over this matter and steps had be taken to preserve the estampages through modern scientific preservation and digitization methods.

References

ARE = *Annual Report on Indian Epigraphy.* New Delhi: Archaeological Survey of India.

EI = *Epigraphia Indica.* New Delhi: Archaeological Survey of India.

SII= *South Indian Inscriptions.* New Delhi: Archaeological Survey of India.

Thiyagarajan, L. 2017. *Ariyalur Mavattak Kalvettugal.* Vol.II. Ariyalur: Kamarasavalli Pathippagam

14. Heritage Management: Application of Traditional Methods

T. Satyamurthy

Abstract

Indian Subcontinent possesses innumerable ancient monuments and sites that herald the ancient glory of the region. They are the resources for modern engineers to understand the ancient building technologies. Experts in this faculty conceived, designed and executed with a sole objective of prolonging the structural stability for extensive period of hundreds of years. There were many expert groups headed by a chief architect called as *Sthapati*. Their experience is found to be documented in the form of *Silpa* texts for the guidance of the future generations. These manuals deal from the selection of proper site, materials and the ideal measurements for each and every category. It is also observed that they preferred materials and construction technology that are easily reversible. There are prescriptions for periodical inspections and rectification of stresses due to age and natural calamities.

In fact, the conservation process was initiated much earlier than the western manual was introduced by John Marshall during the early 20th century. It may be recalled that by the time the Conservation manual was introduced by ASI, thousands of structures like Forts, Palaces. Temples, Churches, Buddhist Viharas/monasteries and Mosques had crossed hundreds of years in age. The engineering skills applied in them were time tested technology and the distresses in some of them were due to non-maintenance of the structures.

The western formulae no doubt created awareness for conservation of ancient monuments, but the indigenous methodology was inadvertently forgotten by the conservation scientists. The concept of *Punarudharana* (rejuvenation) prescribed in the ancient texts provide much needed indigenous techniques for preserving the original grandeur of these monuments. The paper deals with these methodologies in detail.

Keywords: Heritage Management; Traditional Conservation; Heritage Conservation; *Silpa* Texts.

Introduction :

Indian subcontinent possesses innumerable ancient monuments and sites that signify the ancient glory of the region. These sitesand monuments temporally belong to pre-historic to the modern periods and the varietiesof features that they present are unparalleled in terms of their material content and artistic features. In fact, they are the resources for modern scientists and engineers to understand the building technologies adopted by people that protect and preserve them from the natural elements. Experts (*sthapatis*) in the faculty of traditional architecture conceived, designed and executed with the sole objective of prolonging the structural stability for an extensive period of hundreds of years.

It is true that during the pre-historic period they sought materials that were sturdy to bear the external pressure and that could serve as their weapons to protect themselves from wild animals and also find their subsistence. Thus, we have lithic tools and stone axes tools and their manufacturing sites better known as 'industry sites'. Nevertheless, from early historic period they adopted a technology that showcases their skill in execution and selection of materials including the selection of the site for architectural edifices.

Basic Principles

Besides their cultural and traditional affiliation, the ancient monuments reflect the high degree of indigenous engineering skill and technology of the past generations. The modern civil engineers and architects have much to learn from these edifices that have withstood many natural calamities and vandalism through centuries.

By the time India became independent from the colonial rule, peoplerealised that most of their heritage lies in a much-neglected condition. Perhaps the reason is the sudden stoppage of royal patronage that was available for the temples and monuments for many centuries. No doubt our colonial masters evinced keen interest in history, archaeology and heritage and attempted to survey, catalogue and document the

cultural remains. In the 19th century they established the Archaeological Survey of India to document and preserve the heritage remains. But the fact remains that even today a large number of monuments, especially the temples, are in a pathetic condition, due to lack of patronage. On the one hand there exist financial constraints and on the other the traditional technical knowledge had completely disappeared.

In 1923, Sir John Marshall published his *Conservation Manual*, which formed the basis for the conservation policy to be followed by the colonies (Marshall 1923). It is in this context that traditional concept of conservation known as *Jirnnoddhara* becomes relevant. Such magnificent temples or historical monuments are architectural wonders and they reveal the brilliant long-term planning of their creators. At the time of the construction itself due consideration was paid to their upkeep, maintenance, conservation and preservation.

These principles are enshrined in the concept of *Jirnnoddhara*. This is the term we come across in our Sanskrit texts, viz. *agama*s, *vaastu* sastras and inscriptions. The term directly means 'to repair or restore that which is broken or mutilated'.

The *agama* texts and texts on *vastu* (architecture) not only describe in detail the process of construction beginning with the selection of the site of construction, but also prescribe the action to be taken for preservation and restoration due to age, natural calamities, vandalism due to war and other factors causing damage and destruction.

Ancient Indians had incredible knowledge and foresight on the inevitable repairs that are required for prolonging the life of the structures created by them. Sufficient archaeological evidences are available to show that various experiments were made to provide a permanent solution to the problems by selecting the materials for such buildings that require long life.

In earlier stage, the prototype of hypostyle wooden structures served the purpose of religious buildings meant for ceremonious rites and social gatherings. During the beginning of the Common Era wood was replaced by brick and mortar and after many experiments, stone was selected as a permanent medium for constructions during the end of 6th

century CE.[1] After excavating caves and constructing structural stone temples, formal manuals were made for the benefit of the structural engineers and civil architects.

Vaastu texts define the intricacy of the planning parameters of cities, villages, temples and interiors, including fine art of 'fitting design'. The fascinating *silpa* texts record these, beginning with Kautilya's *Arthasastra* of the second century BCE (Kangle 1969) and this tradition extended to the texts, more specifically on planning such as *manjushri vastu vidya sastra* of the 5th century CE, the *Manasara* of the 7th century CE and the *Mayamata* of the 9th century CE (Vidyuta 2017). The *Manasara* clearly states that this compendium was a compilation of material gathered from over 300 other texts, on the architecture and planning in the sub-continent at that time. The 35th chapter of the *Mayamata*, on renovation work, refers to the subject of conservation in a following manner (Bruno 1997):

> A temple (may be) ruined, broken down, fallen down, aged as to its material or decrepit. Those (temples) whose characteristics are still perceptible in their principal and secondary elementsare to be renovated with their own material.If they are lacking anything or have some similar type of flaw, the sage wishing to restore them, must proceed in such a way that they regain their integrity and they are pleasantly arranged (anew). This is to be done with the dimension – height and width – which were theirs, with decorations consisting of corner elongated and other components without anything being added (to what originally existed) and always in conformity with the advice of the knowledgeable.

Historical Records

Similarly, many valuable notes on the subject of conservation or restoration have been identified in ancient texts, some examples of

1. The inscription of Mahendravarman I at Mandagapattu offers evidence. This inscription mentions about the creation of shrines without the use of wood, brick, metal and mortar.

which are referred here. During 7th century CE, the Chinese visitor to India, Hiuen Tsang, records that in ancient times Sasanka, the enemy and oppressor of Magadha, cut down the Bodhi Tree, destroyed the roots down to the water and burnt what remained (Nagaraja Rao 2001, 2011). A few months afterwards Purnavarma, the last descendent of Asoka on the throne of Magadha, by pious efforts brought the tree back to life and in that one night it grew about 10 feet high.

Although it appears to be an exaggerated account, here is a clear example of restoration after the original was defiled by a non-believer, for the stone wall, which was setup by Purnavarma, was nothing but a reconstruction. The *Silapraakara* (stone wall) was erected in the 1st century BCE by the pious zeal and munificence of Arya Kurangi, the wife of Indragnimitra, perhaps the local chieftain. What Purnavarma did was to use the old materials *thabha* (pillars), *suds* (joining pieces) and *usnisas* (coping stones), all made of greyish sand stone. In rebuilding the wall new material granite was used where the old was not good enough (Nagaraja Rao 2011).

Before probing into the rules for such conservation of reconstruction according to the *Silpa* texts and traditions, it is essential to observe the practices known from some of the lithic and other records. It is warned in the texts that any misconception or transgression of general rules would influence the events in the country and may lead to catastrophe in the state, reflecting the belief system. It would rather directly affect the ruler or the sponsor and hence the approval of the ruler was mandatory for any such major reconstruction or repair works including the dismantling an existing temple and rebuilding it (*Isvara Samhitha* LVII).

Lithic Records

Specific orders of the king were recorded in an inscription of Rajaraja Chola I, datable to 1012 CE. The Siva temple at Tirumalavadi was to be repaired. Probably the original temple was made of bricks and was in need of restoration. Rajaraja Chola accorded permission to dismantle the structure and caused arches (*Adi-mukha*) to be

built at the four gates.[2] Besides the budgetary allotment of funds for the construction of such shrines, provision was also made for their maintenance (Nagaraja Rao 2011).

An inscription in the temple of Vijayalaya Cholisvaram (the first of the early Chola temples built around 850 CE) at Nartamalai informs us that immediately after the construction, the temple was struck by lightning and torrential rains, and it was damaged. It was restored by Tennavan Tamil Adirayan (Satyamurthy 2010).

An inscription from the Siva temple at Kudimiyanmalai records that the entrance to the second enclosure was found to be a hindrance. A certain Gangeyarayan enlarged the enclosure and the entrance. While doing so, he ordered the copying of all the inscriptions found on the wall and got the same re-engraved *verbatim* on the new walls. In Tirupati Tirumalai Devasthanam, all the inscriptions of the earlier period from Pallava period to Vijayanagara were copied and re-written in the outer walls of the sanctum during later period. This was executed to save them from further obliteration due to weather action and the loss of the records (Satyamurthy 2010).

A rock-cliff inscription dated to 543 CE from Badami (Bijapur district, Karnataka) states that the fort of Vatapi was strengthened both at the bottom and top by the king Pulakeshin I.

adhasthad-uparishta-chachadurgam-etadachikarot

Another epigraph of the time of Kalachury king Bijala, dated to 1158 CE, records the renewal of the gift of the village Nagahura (Madhya Pradesh) by the king for various services, including the

2. Editors' Note: The first editor of this volume checked the inscription from Thirumazavadi. M.S. Nagarajarao 2001 mentions about the construction of gates on the basis of the order of Rarajaraja I. The inscription from the temple (SII, 5, 652 and 653) in 1012-1013 CE mentions about the copying of the inscriptions existing on the *vimana* before the reconstruction and recording them in the documents (books of Palmleaves). M.S. Nagarajarao 2001 does not specify the reference to the inscriptions.

renovation of the temple and the monastery attached to it (Satyamurthy 2012).

On the moulding of the basement of the temple of Hulleshvara at Dodda Hullur (Bangalore district, Karnataka) there is a three-line inscription in Tamil granta characters, dated to 1324 CE. The record states that this Siva temple had fallen into complete disuse. Therefore, various officials of the town (*ubhayananadesis*, *adhikaris* and the *nattars*) got the temple reconstructed from *upana* to *stupi*, i.e., from basement to the finial of the *Sikhara* (Satyamurthy 2012).

An inscription dated to mid-19th century in the temple of Lakshmi Narayana, within the Mysore Palace fort, records that the *gopura* superstructure over the main entrance to the temple, built by Raja Wodayar (1610 CE), was dilapidated. Therefore, king Krishnaraja Wodayar III got the superstructure dismantled and rebuilt the same exactly like the original (Satyanarayana 1996: 178-79).

According to Vijayanagara records, the Portuguese destroyed the temple at Mylapore, which included Tiruvallikeni in Madras. Against this, the Vijayanagargeneral Rama Raya dealt a severe blow to the Portuguese in 1558 CE. Further, in 1564 CE, just before the battle of Talikota, on the Krishna River, the Hindu temple at Mylapore was totally reconstructed (Nagaraja Rao 2011).

There are many more records in North India which mention that the temples were conserved based on standard principles prescribed in the old manuals. Similar records are also found in public utility monuments like tanks and parks. The Junagadh inscription of Rudradaman (Gujarat) datable to c. 130 CE describes how the unique type of tank, *Sudarshana Tataka*, was damaged due to the ravages of time and was got repaired by the king Rudradaman, who restored it into reuse. The epigraph says that the tank, after repairs, regained its beauty, thus justifying its appellation *Sudarshana Tataka* (Sompura 1968: 71).

It is clear from the abovementioned examples that conservation in Indian context is an ongoing process, whichstarted from the days of its inception. It is more astounding to note that Indian builders were

very careful in the selection of materials for construction. Their concern was the longevity of the material and their sustainability against natural calamities and time. They always used replaceable material with reversible technology.

Conservation in Ancient India

The conservation mechanism in ancient India can be classified under (a) selection of stones; (b) manufacture of bricks; (c) selection of timber; (d) preservation rules; (e) restoration of sculptures; and (f) maintenance and preservation.

(a) Selection of Stones for Durability of Structures

Before we embark on temple renovation or conservation,it is essential to understand the types of materials that were used for temple building. In the early period, temples and palaces were constructed with brick, timber and bamboo while the stucco designs were also used side by side, for fortification of bigger structures. Dry bond granite stone laying up method was predominantly used in Chola period, which was known as *karrali* and most of the brick temples were converted into stone-built ones. Some of the brick temples of the medieval period are preserved even today as at Veppattur in Thanjavur District of Tamil Nadu (Figs. 1 and 2).

Fig. 1. Veetrirunda Perumal Temple, Veppattur, Thanjavur District, Tamil Nadu, before Conservation (Source : author)

Fig. 2. Veetrirunda Perumal Temple, Veppattur, Thanjavur District, Tamil Nadu, after Conservation (Source : author)

In the earlier temples of the Pallavas, where the transformation of perishable materials was replaced with stones, they first used sand stone, which got abraded due to weathering (Kailasanatha temple in Kanchipuram) but later after the 7th century, stone took a pre-dominant position as the major raw material in building a temple. The stones used as raw materials were of different kind and variety. They depended on what was readily available in the closer vicinity as rocks of various kinds. According to K.V. Soundararajan, a renowned Archaeologist, the vast Indian country has varied geological formations and thus he demarcated the types of rocks or stones as follows:

Selected varieties include gneissic granite (Tamil Nadu and Andhra Pradesh), crystalline granite (charnockite) (Tamil Nadu), sandstone (Central India and Karnataka),Kurnool slates and shales (Andhra Pradesh and Telangana),limestone (Andhra Pradesh and North Karnataka), khondalite gneisses (Orissa), basalt or Deccan trap (Maharashtra), chloritic schist (Karnataka), laterite (Kerala, Goa and Coastal Karnataka) and marine sandstones (Saurashtra and south-east Tamil Nadu) (Soundara Rajan 1972: 13-15).

The characteristics of these stones have their advantages as well as disadvantages. For constructional methods, polish, evenness of joint, softness for sculpturing, they would have preferred relatively soft materials.

On the other hand, crystalline stones, though highly durable, are difficult to quarry for the required size and also difficult for carving. Igneous rocks like basalt and sedimentary rock like sandstones have their bedding planes sometimes highly titled and they result in the sliding down of the pillar stems and other parts of construction, which are subjected to pressure, thrust and impregnation of water, which dissolved soluble particles in them. They looked for their compressive strength, weathering and workability-bearing capacity, and their hardness against abrasion.

Therefore, varieties of rocks have been used in various types of construction like foundations, walls, pillars, ceilings and for detailed carvings and sculptures, in some cases with dry bonding and some

with mortar, or in some cases with core and in some without core. It is necessary to identify the raw materials used in the construction of a particular building so that the same materials could be used in conserving them.

Majority of the temples in Tamil Nadu have been constructed with charnockite, some with granite and granitic gneiss, few with limestone, sandstone and basalt.Tamil Nadu was subjected to earthquakes and the consequence of this can be seen in many temples, where the beams and load-bearing members have broken or moved in many temples. It is essential for the conservator to keep this in mind while reinforcing any additional features in the ancient temples.

Also, some of the earthquakes either increase the groundwater table or decrease it. These sudden alterations cause change in the pore pressure in the underlying formations that could cause damages to the foundation. The change of water table creates voids in the earth and the boulders or irregular rubbles that bear the weight of the foundation may move and if the movement is more than permissible limit, cracks develop over the superstructure. In fact, such cracks are warning and if proper measures are not taken carefully, catastrophe may happen.

(b) Manufacture of Bricks

Utmost care was taken to manufacture other materials required for construction. No doubt the naturally available clay served as the binding material during the Sangam Age temples and structures in Tamil Nadu. The process of preparation of bricks is described in detail in many *Silpa* texts. It must be without flaw, compact and uniformly baked and should be giving off a harmonious sound. Among the four types of available earth, salty, off-white, black and uniform, red and swollen the last one was preferable. It should be free from gravel, pebbles,roots and bones. It should be mixed with salt-free white sand and will be made homogenous.

Clods of earth are stacked in small heaps with a central pit and soaked in water and the mixture should be crushed byfoot at least 40 times consequently.Such paste should be again soaked in the juiceof various fruits and vegetable binders. The compound is kneaded three

times and bricks are fashioned with the help of a wooden frame. Generally, 2:8:16 is the standard size prescribed and they are dried and baked in uniform fire. Subsequently, it can be allowed to cool down for a minimum period of one to four months. Such bricks are immersed in water and if found damp free, it should be used for constructions for longevity.

(c) Selection of timber

In the early phase, timber was the primary material used for construction including the side walls and roof. In the selection of timber, ancient Indians considered the green environment as the sole guidance for selection of woods. Trees were not cut without divine sanction and some rituals and permission for cutting trees were sought from various deities. In fact, trees were considered as living beings and enormous ceremonies are prescribed for cutting it.

The chosen trees are prescribed to be perfect, hard and vigorous. They should not be very old or mere saplings. They should not be damaged, crooked and trees grown over mountain, river bank and holy place are preferable. In fine, it should be pleasing to the eye and mind.

In a similar vein, a long list of trees that are rejected for buildings is provided in the texts. Trees close to the temples, struck by lightning, scorched by conflagration that is under cult worship, frequented by birds and animals bent by wind or elephants are forbidden. Trees that are entangled with each other or twisted, affected by white ants, strangled by liana and hollow insideare also listed as prohibited timber. There should be no twigs on their branches. Neither must it be damaged by wild beesnor should they bear fruits out of season. Trees planted on highways or village roads, and found near the tank, well or pond are also not considered for building temples.

Ancient texts caution the builders to re-use the materials from other forbidden buildings and assure that the life of building/temples will prolong if the materials specified are selected properly as per prescriptions.

(d) Preservation Rules

Ancient manuals deal in detail about conservation and preservation process of ancient buildings including temples. Without any incongruity,it divides the renovation into two parts: one for structural repairs and other for maintenance of images that are under worship. Structures that are recommended for conservation are listedas a temple ruined, broken down, fallen down, aged as to its materials or dilapidated. Those temples whose characteristics are no longer perceptible are to be conserved and brought back to its original grandeur.

In such cases they should be conserved with their own materials in fabric and colour. However, better materials than those employed during the initial construction should be used. In any case the dimensions (*Aayadi*) should strictly conform to the original structures. The prime characteristics of the temple with the secondary elements are to be renovated with their own materials, and if not available, must proceed in such a way that they regain their integrity and pleasantly arranged anew with dimensions, height and width without anything to be added to the original measurements and always in conformity with the initial appearance. A knowledgeable expert should monitor such operations.

In case of reconstruction of temples that are completely swept over by flood or earthquake, it can be conjectured with the traces of plinth or the pedestal of the linga (image). The dimensions can be calculated from the dimensions of the pedestal of theimage and in ancient temples, there was always a proportion between the image dimensions of the sanctum, walland superstructure. In fact,we have got much archaeological evidence to establish that the temples were reconstructed after some natural calamities with the same dimensions of the original.

One such practice is found to be documented in Saluvankuppam village in the northern proximity of the Pallava monuments at Mamallapuram. A brick temple dedicated to Muruga (Kartikeya) located on sea shore within 100 metre from high tidal zone, datable to the beginning of Common Era, was destroyed by tidal waves during 4th centuryCE. It was reconstructed with stone walls during the Pallava

period, but again it was found to be pulled down during the 10th century CE and once again reconstructed. But the temple collapsed during the 12thcentury CE. All such natural calamities and resurrections are recorded archaeologically, and it is significant that the original dimensions were not found to be altered. Necessary strengthening was made with higher materials. For instance, the brick walls were reinforced with stone veneers and brick lime core (Satyamurty 2017).

(e) Restoration of Sculptures

The earliest reference to a restoration of sculpture is recorded in the introductory part of the Sanskrit composition known as *Avantisundarikatha* by the poet Dandin, who is considered to be the contemporary of Pallava king Rajasimha, in the beginning of the 8th century CE. The reference is to the restoration of the arm near the wrist of the sculpture of *Vishnu Anantasayin* in the Shore Temple complex at Mamallapuram (Mahabalipuram).

Dandin himself was a learned person in architecture and temple arts. He refers in this work to one Lalitalaya, son of Mandhata, a great master in architectural science who could surpass even the Yavanas. As already stated, the *Anantasayai* sculpture was slightly damaged in one of its arms, near the wrist. Lalitalaya restored the broken part.

Visiting the royal court at Kanchi, he invited the poet Dandin to come to Mamallapuram to see the restoration he had done. Dandin went to Mamallapuram with his friends and saw the sculpture by the side of the waves. 'In the enchanting environment of cool breeze, and the waves almost touching the feet of the image Anantasayin, he saw the extraordinary skill of the sculptor in the restoration work. The work was so perfect that he could not notice the wrist (Manibandha), any traces of restoration. He admired the work of Lalitalaya'(Ramakrishna Kavi 1924).

This account brings out many important facts: (a) it shows that as early as the 8th century CE the restoration of damaged parts of a sculpture was recognised as a skilled art: (b)that damaged sculptures could be restored: (c) even poets and learned men tookakeen interest in

examining such restoration work; and (d) that the restored part should be absolutely true to the original. Further this would go against the popular belief that if a stone sculpture is damaged, it should not be worshipped.

There are several *agamic* passages dealing with the specific question of what should be done with broken sculptures.

They treat them under *prayaschittavidhi*. There are minor variations in rules between one text and another.

The deities are classified differently as a self-manifest image (*Svayambhu Murtis*), those consecrated by sages (*Arsha Pratishta*) and humanly made (*Manusha Pratishta*).

In the case of *Svayambhu* and *Arsha Pratishta*, there is no question of replacements.In the case of humanly made, the sculptures beyond repairs should be immersed in deep water or dropped in river or sea. For this purpose, the parts of sculpture are divided into major limbs and minor limbs. Textual authorities give many options with specifications for guidance in all such cases of damages. The *Mariachi Samhita*, an early *Vaikhanasa* text of the Vaishnavites, says that the stone sculpture, if found damaged in parts other than *Mahaangas*, should be repaired and not discarded. Its divine power should be invoked in *balalaya* and after mending it should be re-consecrated.

It is really interesting that conservation and preservation of temples were considered more holy than their construction. The epigraphs, recording the grants for various services of the temples, including restoration, maintenance and upkeep, frequently enjoin, in verses, that a person who preserves this cultural heritage will gain greater merit than the one who donates (Nagaraja Rao 2011; Ganapati Sastri 1925).

A person who preserves an ancient structure is more laudable than the person who constructs and the latter will attain *svarga*, but the former will reach the holy feet of Vishnu.

Various process of conservation is listed as follows:

Khanda-sphutita or Jirnnoddhara: Repairing the portions which are damaged and mutilated, and which have developed various types of accretions.

Khanda-sphutita or Navakarma: Repairing and renovation, as well as renewal.

Sphuta-navikarana: Removing accretions. The term *sphuta* (*sphutita*) may also be taken to mean 'bulged' or 'out of plumb' portions, which indicates setting right such deformities.

Sudhakarana: Applying new white colour or plastering with white mortar.

Taru-gulma-nirmaalikarana: Removing the over grown vegetation, moss and lichen (Gurukkal 2017).

(f) Maintenance and Preservation

The most significant preservation measure prescribed in ancient Indian texts and practiced are the rituals oriented towards the preservation of the main deities and inner circuits of the temple. Once the temple is consecrated, annual preservation of the main image and the inner circuit is made mandatory by a ritual known as *SamvatasaraAbhishekam* (annual maintenance). It is more applicable in Saivaite temples where the main image is constantly kept in many anointments by application of different liquids (Subba Raman 2014).

During this occasion, mostly coinciding with the day of consecration, every year the main image made of stone is covered with a specially prepared paste. This semi-solid herbal product will have mainly rice flour mixed with curd and made to ferment for 12 hours and then applied over the surface and then allowed to dry for at least 10 hours. By chemical action, the herbal paste as it dries,the accretions like oil and dust would stick to the paste and the image will be cleaned. Some rituals are performed as per *agamic* prescriptions as a religious rite.

For keeping the inner sanctum clean and tidy, especially in Siva shrines where the main lingais worshipped by offering water, milk, fruits, honey, sandal paste and many other ingredients,several measures are prescribed as a part of rituals. The very first offering to Siva is ordained to be with *Panchagavya*, an indigenous herbal germicide inside the sanctum. The five products of cow (milk, curd, ghee, dung and urine) are mixed in a particular proportionand offered as the very first *abhisheka* (bath) for Siva.

Panchagavya is an Ayurvedic and Siddha medicine to start the beginning of any treatment in India and it is a very effective anti-germicide product. There are many lithic records to show that the rulers issued many endowments to provide this to the temples by maintaining *goshalas* (cow dwelling) and supply the ingredients to temples. This tradition oriented towards preservation continues till today in many shrines of South India.

Besides, there are prescriptions for monthly preservation measures by performing particular *abhisheka* every full moon day. The materials mentioned for 12 months are *dahavanam* (*artemisia pallens*), sandalpaste, trio-fruits (banana, mango, jackfruit), milk, indigenous sugar paste, fried pancake,cooked rice and lighting with traditional lamps, ghee, sugarcane juice, wool soaked in ghee, and curd. The prescriptions depend upon the season and the compounds undergo chemical and biological reactions and smoothly clean the surface without accretions and preserve it for a longer time (Soma Sethu Dikshitar 1982).

Infact, there are many such rituals and rites that keep the environment and atmosphere also pollution free. One such is the final ritual in any temple where fumigation is done by generating *sambirani* (Perfume similar to Frankincense) smoke. In a similar vein, the weathered and weak parts of soft stones like sandstone are strengthened by the application of tender coconut water. *Agama* texts, e.g. *Kamigama*, set down many such principles for the preservation of temples including the images and structures.

Conclusion

The Western contemporary formulae no doubt created awareness about the conservation of ancient monuments, but the indigenous methodology wasinad vertently avoided by the conservation scientists. It is also essential thatan attempt to scientifically establish the chemical reactions of these indigenous preservation measures for our wider use and preparation of standard charts. The concept of *Punarudharana* (rejuvenation) prescribed in the ancient texts and practiced all these centuries provide much needed native techniques for the preservation of ourmonuments.

References

Primary Sources

Isvara Samhita by Matanga Muni, Varadachari, V and Gaya Chand Tripati (Ed) (2009),Varanasi.

KautilyaArthasastra, Ed. Kangle. R.P. 1969. Delhi: Motilal Banarasidas.

Mayamatam, Ed., Brono Dagens Vol II. New Delhi: IGNCA. *Edited by* Bruno, Dagens Ed, 1994. *Mayamatam*. Vol II. New Delhi: IGNCA.

Kangle, R.P. (Ed.) 1969. *Kautilya Arthasastra*. Delhi: Motilal Banarasi Das.

Varadachari, V. and Gaya Chand Tripati (Ed.) 2009. *Isvara Samhita* by Matanga Muni. Varanasi.

Secondary Sources

Ganapati Sastri (Ed.) 1929. *TantraSamuchchya*, Ch 11. Trivandrum: Oriental Manisript Library.

Gurukkal, Aruna Sundara 2017. *Jirnnodharana Principles in Kamika Agamas, (Tamil*). Chennai.

Marshall, John. 1923. *Conservation Manual*. Delhi: Archaeological Survey of India.

Nagaraja Rao, M.S. 2001. The Concept of Jirnnoddhara. *Bulletin of the Deccan College Research Institute*. Deccan College Post-

Graduate and Research Institute (Deemed University), Pune. 60/61: 15–20

Nagaraja Rao, M.S. 2011. *Proceedings of Indian Art History Congress, Kanyakumari*. Published by Indian Art History Congress, Guwahati, Assam.

Ramakrishna Kavi Manavalli Ed. 1924. *Dandin*. (Sanskrit), Dakshinabharati series 3. Trichur

Sompura, Kantilal F. 1968. *The structural temples of Gujarat*. Ahmedabad: Gujarat University.

Soma Sethu Dikshitar. 1982. *Sri Chidambara Kshetra Sarvasvam*, (Sanskrit). Chidambaram

Satyamurthy, T. 2010. *Conservation Manual*. Hyderabad:Govt. of Andhra Pradesh Endowment Department.

Satyamurthy, T. 2012. *Conservation in Ancient India II*. Yaali, *Journal of REACH Foundation*, May 2012, Ed. Natarajan Ogai. Chennai: *REACH Foundation*.

Satyamurthy, T. 2017. Excavations in Mamallapuram (Tamil). *Journal of Tamil Studies* 97:10-35. International Institute of Tamil Studies, Chennai.

Satyanarayana, A. 1996. *History of Wodeyars of Mysore*. Mysore: Directorate of Archaeology and Museums.

Soundararajan, K.V. 1972. *Indian Temple Styles*. New Delhi: Munshiram Manoharlal.

Subbaraman, S. 2014. *The Role of Chemistry in Archaeology*. *Ancient Sciences and Archaeology* V, (Sampath, M.D and Pankaja, N. Eds.), pp. 16-25. New Delhi: B.R. Publishing Corporation.

Vidyuta, K. 2017. *Devaprasada as in Visvakrma Vastu Sastra*. Dharwad: Karnataka Historical Society.

15. Archaeological Heritage Management in India: Current Status, Issues and Prospects

V. Selvakumar

Abstract

Archaeological heritage, which forms part of cultural heritage, is a valuable resource that a contemporary society needs to preserve for the benefit of its people and future generations. India is one of the few regions of the world with rich and diverse varieties of archaeological heritage that requires more focussed attention and systematic heritage management in the current context. Preservation and management of the vast corpus of the heritage sites and monuments of India is a highly challenging mission, due to many pressing social and economic demands and issues of the country. This paper discusses the current status, issues and prospects for archaeological heritage management in India. It argues that more serious and holistic heritage management approach is essential to care for the valuable archaeological heritage of India and make it more relevant to the needs of the contemporary society.

Keywords: Archaeology, Heritage Management, Cultural Tourism, Heritage, India

1. Introduction

'Heritage' is defined as the collective natural and cultural resources that have been inherited by a society from the past generations. Cultural heritage is defined "as the entire corpus of material signs – either artistic or symbolic – handed on by the past to each culture and, therefore, to the whole of humankind" in the *Draft Medium Term Plan 1990–1995* of the UNESCO (Jokilehto 2005: 4). The International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter 1964) mentions that "the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage." The concepts of heritage and heritage resources are encountered more

often these days in many contexts such as popular media, academia, state activities and in the public arena, and heritage has come to occupy a significant position in the discourses of the contemporary society. It has been argued that heritage has become a powerful discourse in the post-colonial global context (Smith 2004, 2006, 2012; Wu and Hou 2015). India is one of the regions of the world that possess a very rich assemblage of cultural resources, which does contribute to its vitality and economic development. This paper discusses the current status, core issues and prospects for archaeological heritage management in India.

Theoretical Orientations: Perceptions of Archaeology and Heritage

In a sense, archaeology and other related disciplines bring in a 'pure' material cultural perspective to the artefacts, sites and monuments, which have functional, ideological and symbolic significance among the living cultures. Archaeology treats material culture as evidence and an expression of the behavioural and cognitive realms of the cultures; and archaeology in fact contributes to the objectification and 'museumisation of material culture' (Ternhag 2006). For example, the traditional holder-stand for the wooden ladles used in Southern India, with a functional value, from an old hut filled with smoke would be seen as a symbol of decadence or poverty, while the same specimen becomes an exalted exhibit of heritage in the air-conditioned gallery of a museum or in the reception space of a luxurious hotel. In the first context, it is not in a heritage milieu, but in the latter, it is cherished as heritage in the museumised milieu; and therefore, heritage has its own exclusive, constructed or rather artificial spheres in the contemporary world. A temple or image of deity moves from the realm of a belief system in a living culture to an object of art to be appreciated as a part of archaeology, museology, heritage and cultural/heritage tourism. The images of divinities are perceived as soulful as a result of their abstract and symbolic value as part of the belief system by a devotee. On the contrary, archaeologists, art connoisseurs, museologists and tourists, as outsiders to the cultural reality, would only appreciate of the aesthetic value, material attributes and the beauty of the images. An antiquarian or collector or trader in antiquities would view the material/

antiquarian value and monetary profits, and would want to possess them as a commodity or place them in a museum or would want them as a subject of research. This is where an object or monument moves from the living cultural context, which could often be belief-centred, to the domains of archaeology, heritage and tourism to the museumised landscapes. In view of the differences in perceptions, the believers in the temples in certain areas of Southern India, sometimes are reluctant to allow the images of deities to be photographed, especially with no attires, as desired by archaeologists and art historians for their study. When archaeologists excavate the burials of the ancient people, they face ethical issues and in fact infringe upon the 'rights' of those who created the burials, in a highly ideal sense; although such excavations can be justified on the basis that these burials would get destroyed by natural or human elements, and in the absence of living linkages, if they are not excavated and preserved. The controversies related to the Native American burials in American museums can be cited as another important case in point here (Rosen 1980; Platzman 1992; Echo-Hawk and Echo-Hawk 1994). A similar perspective would argue against showcasing the image of a deity of particular religion in a museum rather than the temple or declaration of a temple as protected archaeological site, against the wishes of the community.

In this context, the statement of a Member of Parliament of India, who opposed the declaration of a temple at Mamallapuram by the Archaeological Survey of India as a protected monument, is relevant. The Member of Parliament

> "has claimed that residents of Mamallapuram viewed the Archaeological Survey of India's (ASI) notification to take over the Sthalasayana Perumal temple as a move to 'bring more area in Mamallapuram town under the control of ASI.' While strongly opposing the move, the MP, in a letter written to the ASI, Director General"
>
> observed that
>
> "this temple located right in the heart of the town was merely a place of worship and has no heritage value or archaeological importance" (*The Hindu* 2012).

Heritage is often recreated, reinvented and reimagined in the present, and it is one of key fashionable concepts of the contemporary age, identical to 'herbal' and 'organic' that express the deep desire of the modern humans to delve into, possibly the imagined, natural and ancient lifeways. Certain words and concepts have very powerful impact on the cognition and consciousness of the modern humans. Even when we simply utter the terms such as 'green,' 'nature,' tradition, 'herbal,' 'natural,' and 'environment,' and 'heritage,' they create deeper vibes and impact or positive feeling among certain people, in the current context where people's ways of life have transformed greatly. The expressions such as 'heritage hotel,' 'heritage restaurant' and 'heritage medicine' do deeply influence the perception and consciousness of the tourists and force the decision making. Sometimes, such adoptions lead to the commodification and misuse of the label 'heritage' and what is presented in the name of heritage might be a just an ordinary package. Deep down among us, in our consciousness, there is a desire for getting closer to the roots and nature, and heritage helps to fulfil exactly that craving need. Heritage thus is bound to become a commodity in the hands of economic forces, due to this craving, as pointed out by Buddha in his teachings.

Perhaps the excessive effects of profit-driven market economy, mass produced packaged commodities, and the dominance of science have made people to approach the conundrums associated with modernity with more suspicion. With the coming around of wheel, now people look at the heritage traditions with greater interest and respect in this age of globalisation, where many feel the loss of their roots, even while enjoying the benefits of market economy. Heritage has multi-layered meanings, functions and significance in the contemporary society. Smith (2012) argues that

> "heritage can be usefully understood as a subjective political negotiation of identity, place and memory; that it is a 'moment' or a process of re/constructing and negotiating cultural and social values and meanings. Moreover, that it is a process, or a performance, in which we identify the values, memories and

cultural and social meanings that help us make sense of the present, our identities and sense of physical and social place."

Heritage is seen as an inherited property or value and is possessed by a group or a nation and attempts to copy or reduplicate a heritage component in another context is often contested. Geotagging and intellectual properties rights are applied to heritage resources nowadays to protect hereditary rights. For instance, the attempt at creating a replica temple of Cambodia's Angor Wat in the state of Bihar in India created a furore and this project was subsequently modified with the interference of Cambodian officials and Government of India (Bhaumik 2015; Jha 2015; Dhar 2018).

The perspective of studying, analysing and preserving archaeological sites and antiquities as specimens of art and tourism or evidence of the past societies is the main thrust of archaeological and heritage studies. In the traditional Indian notion, unwanted old objects are to be destroyed or abandoned or recycled and very rarely, they are curated. Ancient Indian religious texts warn that an image that has been broken or mutilated should not be worshipped (Nanda 1991) in a temple, and it should be discarded. Just before the harvest festival of *Pongal,* celebrated in Southern India, people destroy old objects in fire, and in fact, many old palm-leaf manuscripts containing very old poems and rare information were burnt without knowing their value in the early 20th century; but fortunately some of them were recovered to preserve the corpus of Sangam Tamil literature by U.V. Swaminatha Aiyar (Venkatachalapathy 2005), C.W. Damodarampillai and other scholars. The disappearance of past traditions and the arrival of new ones have always been considered as a part of cultural process by the ancient Indian authors. For example, the Tamil grammatical works including the work of *Nannul* mention that it is inevitable that old traditions will get replaced and new element will occupy its place (Pavananti 1995). However, the old bronze images, temples and copper-plate documents were carefully preserved in ancient temples as sacred objects and/ or as a part of traditional archival practices and Indians had their own approach to conservation as *Jirnoddhara* (Nagaraja Rao 2001; Binumol Tom 2013; see, Rajavelu; and Satyamurthy in this volume).

In India, there also have been traditions of preserving materials and restoration, which contribute to the indigenous approaches to heritage preservation. Thus, some of the theoretical perceptions and practices of heritage management are not entirely new to the Indian traditions, and the indigenous epistemological ideas need to be carefully researched to understand the heritage management processes and practices of pre-colonial India and for the benefit of social science research in general (Selvakumar 2009).

Interest on Heritage and Heritage Studies

Heritage is among the most sought-after concepts in the contemporary context which may be associated with the rise of rootless, displaced nature of the *Homo sapiens sapiens* in the age of the Anthropocene (TAH 2018), contributed by urbanisation, market economy, economic globalisation and the corporate cultural milieu. In the context of urbanisation and modernisation, the developments of post-colonial contexts and 'anthropological turn' and the policies and conventions of the UNESCO in the late 20th century, interest in heritage and heritage studies has begun to proliferate. While the development of archaeology goes back to the Renaissance times in Europe, the rise of heritage studies is associated with 'critical museum studies, new social history, postcolonial theory, the cultural turn in anthropology' and the development of archaeological theory (Shanks and Tilley 1992; Silverman 2014; see also, Cleere 1989; Labrador and Silberman 2018).

Archaeology which initially started as a pastime/hobby became a state sponsored and controlled enterprise and it was mainly directed by a small group of professionals of the state and academics. Heritage has become a more diverse and open arena for many stakeholders and communities. Thus, archaeology and heritage present two contrasting approaches to the past; although heritage has also been a part of the dominant or authoritative discourse (Silva 2016). Labrador and Silberman (2018) aptly summarise the transformation of the studies and practices related to the past, from the corridors of power into that of cultural heritage. They argue that cultural heritage is not entirely dependent upon the expertise of the professionals such as archaeologists, curators and conservators, but has moved beyond disciplinary boundaries to include

"vernacular architecture, intangible cultural practices, knowledge, and language, performances, and rituals, as well as cultural landscapes" and from the main thrust of "the maintenance of material fabric" the focus has shifted to "explicitly social with methods foregrounding public engagement, diverse values, and community-based action."

In recent years, there has been a deep interest on heritage in India and several new developments have taken place. Delhi Institute of Heritage Research and Management was established in the late 1990s, Centre for Heritage Studies was set up in Kerala in 2002 and the Centre of Heritage Management was established at Ahmedabad University in 2011. The Archaeology Department at Deccan College Post Graduate Research Institute, Pune, started a diploma programme in Heritage Site Management and Scientific Conservation, and produced two doctoral dissertations focusing on heritage management (Badhreenath 2014; Bhat 2016). The development of heritage studies began in the late twentieth century and there are a few publications focusing on archaeological heritage management in India (see, Thapar 1984; Baig 2003; Bhowmik 2004; Thakur 2007, 2010; Venkatraman 2009; Ota 2010; Pappu *et al.* 2010; Selvakumar 2010; Jain and Hooja 2016; Menon 2015, 2017; Lahiri 2012, 2017; Jain and Arora 2017; Desai 2019). The publications on heritage emanating from India in the recent years also clearly highlight that heritage has drawn widespread attention among the various sections of the society and particularly, the academia (Lahiri 2017; Paddayya 2018; Ray 2018; Thapar 2018).

Heritage as a Commodity

Heritage has become a commodity in many contexts[1] (Chang 1997; Prideaux 2003; Pai 2016) and a cherished cultural value contributing to identity formation and national and regional pride, and genesis of these perceptions can be traced from the beginning of

1. An example is the development of astrological narration based on old palm-leaf records, where it is believed that the past lives of people are written on palm-leaf manuscripts, as practised at Vaithiswarankovil in Tamil Nadu (Donovan and Donovan 2008). These are part of the processes related to cultural development and production, and are often belief-centered. The effects of these developments have to be a tackled as part of heritage management. However, in reality such elements add 'fun' to heritage tourism.

archaeology. There are arguments that heritage studies have not been subjected to sufficient theorisation and mostly the Western notions prevail in such limited theorisation (Winter 2014). There are a few publications available on heritage management in the Asian Contexts; presenting non-Western perspectives (Silva and Chapagain 2013) and they argue strongly that indigenous perspectives are necessary in heritage studies (Chapagain 2013). Smith (2012) observes about the 'Western and Eurocentric Authorised Heritage Discourse' that "frames archaeology heritage practices and works to conceive heritage as specifically 'archaeological heritage'." The reason for this development could lie in the very nature of the origins of archaeology and other related material culture-oriented studies, which primarily focus on materiality. These developments call for more non-Western perspectives to heritage management and preservation, in addition to the adoption of relevant non-local (Western) and universally accepted practices. Another important development in the area of heritage is the critical heritage studies where the attention is directed on the broader social and cultural contexts of heritage studies, the relationships between the past and present and the broader social issues related to the perception and use of heritage (Lowenthal 1985, 2015; Winter and Waterton 2013; Wells 2017).

In the contemporary globalised world, where the lifeways of the people have transformed due to many factors including urbanisation, transformed production of goods and services, migration, displacement, formation of diaspora and transnational communities, Information Technology revolution and penetration of social media, heritage has become a matter of identity, a cultural value and also a commodity. Tourism is one of the important factors that contribute to the commodification of heritage. The global tourist arrivals were at 2.5 million in 1950 and this figure reached a whopping 1.4 billion in 2018 (UNWTO 2009; UNWTO 2018; ITA 2019) and the tourist receipts have been estimated to be 1340 billion US $ in 2017. The phenomenal development of tourism is one of the major agencies for the importance attributed to heritage and its preservation. Cultural tourism is an area that has a lot of significance to India (Allchin 1969) and it has more relevance in the twenty first century.

2. Status of Heritage Management in India

Historical Background

The disciplines of archaeology, anthropology and history and other related branches of study were introduced to India through the European intervention during the colonial period. Several social, cultural and intellectual developments that took place in India after the colonisation, in post-15th century, have impacted the country and its intellectual milieu at an unprecedented, unimaginable manner. The colonial rulers and administrators documented, described and preserved the various facets of Indian culture out of curiosity, necessity and also to gain knowledge for controlling the society; and there are both brighter and darker sides to this story. They developed institutions, mechanisms and framed policies that contributed to the development of heritage management system in India, although with a colonial bias. The destruction of Harappa for a railway line, the stupas and the precincts of the Gangaikondacholapuram temple could be cited as illustrations of the darker sides of colonial activities. The establishment of the Royal Asiatic Society of Bengal in 1784 by Sir William Jones, the appointment of Archaeological Surveyor in 1861 due to the efforts of Alexander Cunningham and the foundation of various societies (e.g. The Literary Society of Bombay and Madras Literary Society) focusing on cultural studies, creation of museums across the country, starting from the Indian Museum at Kolkata in 1814, opening of archaeological departments in the princely states and several other developments laid the foundation for archaeological research as well as heritage management in India. New legislations were enacted for the preservation of archaeological heritage (e.g. Indian Treasure Trove Act, 1878) and antiquities were collected and dispatched to various museums in Europe and in this country. The colonial administration contributed immensely to the study of past and heritage preservation.

The discovery, excavation and documentation of the historical sites, documentations of temples and inscriptions and the unearthing of the Harappan Civilisation in the early 20th century made greater impact on the historiography of India. For a detailed history of archaeological research in India, see, Chakrabarti 1988, 1990, 1997, 2003; Lahiri 1998, 2000, 2012, 2017; Singh 2004, 2009; Paddayya 1990, 2004, 2014, 2016, 2017, 2018 and Pratap 2014.

Heritage Management Research and Development

The development of heritage management in the form of *Punaruddharana* must be seen as an activity that was initiated in the ancient period (Nagaraja Rao 2001; Binumol Tom 2013). Inscriptions and texts of India do provide evidence on the traditional practices of conservation and preservation that existed in the medieval times. During the colonial period formalised practices of conservation and heritage management were initiated in India. Under the colonial administration, throughout the 19th century, the focus was more on core archaeological research and documentation; however, conservation activities were also initiated as indicated by the preservation attempts at many of the monuments. In colonial times many monuments were destroyed due to the activities of road builders, railway contractors and local *Zamindars*/ landlords (Imam 1966), while at the same time colonial agency did contribute to preservation (Imam 1966; Ray 2009: 352; Menon 2015, 2017). In 1808, for example, conservation efforts were undertaken on the Taj Mahal (Ray 2009: 354). In 1810, Capt. Taylor, a military engineer, cleansed the Taj Mahal and replaced the missing stones in the monument. In the case of the Qutab area in Delhi where the monuments were damaged in the earthquake of 1803, the damaged cupola was replaced. Major Robert Smith undertook repairs during 1826-28 on the order of Governor General Earl of Amherst. A cupola designed in the Mughal style with a Bengal type Chhatri was placed on top of Qutb Minar and the original balustrades were replaced with railings. But, in 1848, the new Chhatri was removed. Fatehpur Sikri, Sikandara, Akbar's Tomb were damaged in the mutiny of 1857 and they were repaired subsequently (Ray 2009: 352-354). The work of Alexander Cunningham is criticised for the destruction of stupas to recover the casket relics. From the early 20th century, heritage preservation has been given due consideration. The Ancient Monuments Act of 1904 and Sir John Marshal's (1923) *Conservation Manual* can be cited as important milestones in the heritage management practices of India. The introduction of the concept of authenticity dates back to this period and the colonial contribution to heritage management and conservation has been critically looked at as a part of hegemonic practices (Lahiri 1998, 2000; Sengupta 2013a, 2013b, 2015; Menon 2015).

Archaeologists from the academia have mainly focussed on excavations, research and publications, while the Archaeological Survey of India has concentrated on excavations, apart from its thrust area of conservation and heritage management. The loss of the main Harappan sites to Pakistan, after the independence, forced the Indian archaeologists to give extra focus on locating and researching on the Indus Valley civilisation, which has been associated with the grand Indian national narrative; while the smaller sites have not been given enough attention as pointed out by K. Paddayya, and Shanti Pappu in the papers of this volume. The colonial constructs of Aryan and Dravidian identities of the Indian populations have deeply affected the perceptions of their past among the Indian public and academia (Selvakumar 2006). Overall the perspective of heritage management has been limited in the approaches of archaeologists, but with a restricted focus on outreach activities, till the 1980s. Researchers and enthusiasts have worked on to develop local archaeological museums for public outreach: Maniklal Singha, Chittaranjan Dasguptha (School teachers) and Acharya Prafulla Chandra Ray at Bishnupur (Mustafi 2016), K. Paddayya at Hunsgi, Karnataka (See, Paddayya, in this volume), Ravi Korisettar in Bellary, Karnataka and Shanti Pappu in Chennai, Tamil Nadu; ASI's 40+ site museums including the ones at the Harappan sites of Lothal, Dholavira, Ropar and Kalibangan; Rajinikanta Gyan Mandir museum, Dharas in East Medinipur, West Bengal by Aurobindo Maiti and the site museums as part of KCHR's Pattanam excavations, directed by P.J. Cherian and the Muziris Heritage Project of Kerala Government; theses are a few of many more initiatives. Shanti Pappu's contribution to outreach activities mainly targeting children is remarkable.

In the current context, the perspective of heritage management needs to be more vigorously incorporated by the archaeologists in their research as well as academic programmes, and such an orientation is definitely essential for the better preservation of archaeological heritage and to produce capable professionals to match the heritage management requirements of the country in the current scenario.

Architecture, museology, conservation and tourism are the other branches of knowledge that extend interest on the heritage

structures and material culture, conservation and heritage management. Architects and conservators specialising in urban planning and design and structural conservation have taken interest and contributed to heritage management (Menon 2015; Desai 2019; Thakur 2007, 2010, 2011; Venkatraman 2009; Jain and Hooja 2016; Nanda 2017, Jain and Arora 2017).

Agencies

The Archaeological Survey of India, established by the British Indian government with Alexander Cunningham as the first surveyor in 1861, is the nodal national agency for the preservation and protection of archaeological remains, with various divisions such as temple and building survey, conservation, excavation, museums, epigraphy and World Heritage Sites. It manages the world heritage sites and monuments and the select national monuments. The focus on heritage conservation has increased over the years and the funds allotted for the conservation of archaeological monuments have increased in the recent past (Fig. 1) suggesting the attention paid to conservation of heritage monuments.

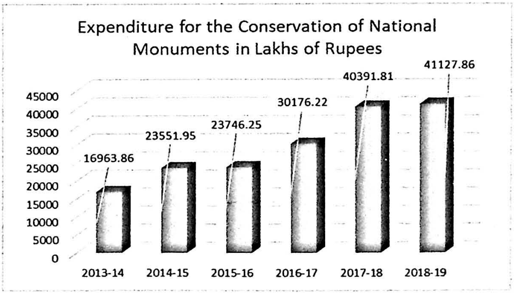


Fig. 1. Expenditure on the Conservation of National Monuments in India (in Lakhs of Rupees). (Figure for 2018-19 is allocation). Source: http://pib.nic.in/newsite/PrintRelease.aspx?relid=181210

Major museums of national and state importance have been established all across India and they preserve vast varieties of antiquities and art treasures. The Indian Museum, Kolkata, the first museum of India set up in 1814 as part of the activities of the Royal Asiatic Society of Bengal; National Museum, New Delhi; and Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal are some of the principal museums of India. Now there are hundreds of museums of varied types in India and more museums are in the pipeline; some of these museums in the major tourist centres enjoy huge visitorship. National Museum Institute of History of Art, Conservation and Museology offer academic programmes on museology and heritage conservation. The meseums of India need to improve in terms of presentation of coherent themes and narratives in an attractive fashion.

In the post-Independence period, dedicated archaeological departments were created by the state/regional governments of India to manage the archaeological sites and monuments in the state levels, and these departments undertake archaeological excavations and fulfil the regional needs related to heritage management. Separate departments exist for the management of museums under the state governments. The archaeological and museum departments of India at the state level remain relatively less funded and do not have enough trained professionals. Hence the monuments protected by the state departments do not get the same degree of attention that is offered to the nationally protected monuments. The main hindrance has been the notion, among the decision makers at the state level, that these departments do not deserve importance, due to the poor generation of income and the associated budget; and as a direct result, the 'political' perception, in some contexts, has been that bureaucracy may be posted in these departments as an unofficial punishment strategy.

In the era of economic liberalisation and globalisation that started from the 1980s, new awareness emerged with the intensive development of tourism and the focus on foreign exchange, as a result the departments of tourism gained importance. However, this transformation did not lead to the improvement of the archaeology and museum departments at the state level. This is where change in

perception is needed among the politicians and bureaucracy to provide due importance to the departments that deal with cultural heritage on par with tourism department, and sometimes these two departments could be integrated into a single network along with tourism for the benefit of heritage management. Another government segment related to heritage management has been the departments of religious endowments that look after the living heritage monuments across India, mostly temples and religious institutions which have several heritage monuments and antiquities under their custody. Some of these departments lack heritage management perspective and the heritage management issues related to the storage of bronze images of the temples of Tamil Nadu can be cited as an example (Vijayakumar 2018; IIC 2019).

Across India, there is increasing interest in the development of heritage resources among the local administrative bodies. In the recent years, heritage commissions have been set up by the urban administrations. Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Kochi, Ahmadabad and several other cities have included heritage management as part of their urban development plans and programmes through the formation of commissions, committees and policies. The town of Cochin in Kerala has set up the Centre for Heritage, Environment and Development (C-hed). Several small local bodies or *panchayats* show interest in setting up museums for heritage preservation and awareness; there are *panchayats* in Kerala that have taken up the task of setting up of museums and these developments have come up mainly after the 1990s. Mumbai and other cities have declared heritage policies. However, there are many blocks on the ground; there are not enough trained personnel to take care of heritage monuments in many of the city and town administrations.

The Government of India has taken measures such as the establishment of the National Cultural Fund by the culture ministry in 1996; the National Mission on Pilgrimage Rejuvenation and Spiritual, Augmentation Drive (PRASAD) Scheme and The National Heritage City Development and Augmentation Yojana (HRIDAY) scheme of the Ministry of Housing and Urban Affairs launched in 2015, to enhance contexts of monuments and sites by improving infrastructure and facilities at several pilgrimage sites.

Several trusts and societies have been established in the recent years for research and knowledge dissemination on cultural heritage, history and archaeology. One possible factor behind these developments is the interest for heritage that developed in the post-liberalisation period. In the recent years, many non-governmental and private institutions have developed interest in heritage management and conservation. The Indian National Trust for Art and Cultural Heritage (INTACH) is a private 'non-profit organisation' established in 1984 for the conservation and preservation of Indian heritage (Menon 2015). Several private trusts and institutions too are involved in archaeological research, conservation and heritage management or awareness activities (e.g. DRONAH--Development and Research Organisation for Nature, Arts and Heritage); INTACH with chapters across India; Aga Khan Foundation; Sharma Centre for Heritage Education and REACH Foundation, Chennai; DHAN Foundation and Greenwalk (Pasumai Nadai) Madurai and Tamil Heritage Foundation, Germany). INTACH and DRONAH are some of the important non-governmental organisations contributing to heritage management initiatives. There is a need for more non-governmental agencies and interested individuals who could supplement the work of government agencies in the area of heritage conservation.

The university departments and academic institutions that offer post-graduate and doctoral programmes in ancient history and archaeology train the younger generation who become heritage managers; for example, Deccan College, Maharaja Sayajirao University, Allahabad University, Banaras Hindu University, Kolkata University, Madras University, Kerala University and Tamil University. However, very few institutions offer courses in heritage management, museum studies and conservation. The Institute of Archaeology managed by the Archaeological Survey of India offers post-graduate diploma in archaeology. Delhi Institute of Heritage Research and Management (DIHRM) and the Centre for Heritage Management in Ahmedabad offer heritage management related academic programmes. However, the programmes in archaeology and heritage do not generate enough employment and this is an important issue that has to be addressed in the future heritage management initiatives in India. In the 1980s,

the University Grants Commission of India offered special financial assistance to the colleges and universities to combine the subjects of tourism with history, and this has not met with much success. The view of some of the education managers that history is a non-productive subject which needs to be changed to generate employment, and made more relevant to the contemporary society, perhaps led to the idea of combining tourism and history in the academic courses. The intake of students in history streams is huge in India (Figs.1 and 2) and courses on heritage studies could be introduced in the history and social science streams.

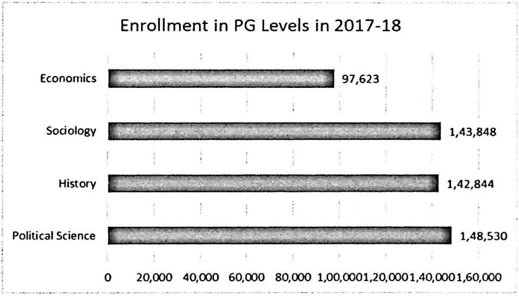


Fig. 2. Student Enrolment in PG programmes across India, 2017-18. Source: AISHE 2018

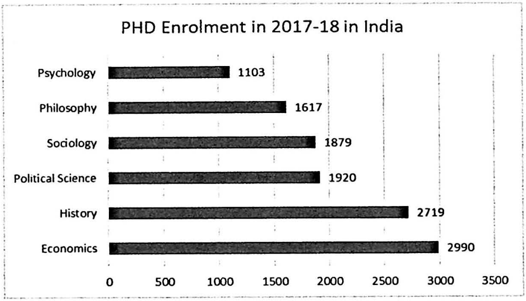


Fig. 3. Student Enrollment in Ph.D. programmes across India, 2017-18. Source: AISHE 2018

Interested individuals and proactive advocates, academicians, judges and bureaucrats and the courts, and the enactment of Right to Information Act in 2005 have intervened in many of the issues related to heritage preservation. Court intervention has led to transformation in the manner in which heritage conservation is managed in India (Lahiri 2017). In some instances, the movements of people and action by individuals have also contributed to the preservation of monuments and sites.

Sites and Monuments

There exist tens of thousands of archaeological sites and monuments in India, and many of the sites and monuments have not been documented and listed properly. The Archaeological Survey of India has declared around 3686 monuments and sites as nationally important (PIB 2018). The World Heritage Sites of India include 29 cultural and 7 natural sites, and one site of mixed tradition (WHC 2019). While the world heritage sites are preserved very well, other categories of monuments too deserve more attention. Besides the state-protected monuments, there are numerous unprotected sites and monuments (Darsana and Selvakumar 2015). Currently, there is no

comprehensive database on the archaeological sites and monuments and the National Monuments Mission Authority has been collecting data on the archaeological resources of the country as part of database development.

On the basis of the physical features, the heritage sites and monuments of India could be classified into three types:

- Archaeological sites: buried mounds with artefacts and structures
- Archaeological monuments above the surface: Abandoned and the living monuments (under worship or use)
- Heritage sites with natural hillocks and landscapes covering a large area (e.g. Hampi ruins)

Among the archaeological sites, the buried sites and mounds are often located under the contemporary settlements and are actively used by people; when these sites are to be protected, the contemporary people's livelihood is interfered with.

The archaeological monuments are mostly temples and other religious structures. One category of the structures is living monuments and other is abandoned monuments which are not in use. Heritage landscapes cover sites that include both hillocks, monuments and site contexts covering a large area (Selvakumar 2012-13). The concept of landscape helps holistic conservation. While some of the sites and monuments are protected under the government legislation, several sites and monuments remain unprotected.

The sites and monuments, based on the status of conservation, the monuments can be divided into

- *Unprotected*: Sites and monuments that have not been listed or protected, under the custody of the private parties.
- *State-protected*: Protected by the regional/state governments.
- Sites and monuments of national importance protected by the ASI.

- Sites and monuments of the World Heritage Category enlisted under the UNESCO Convention 1972.

All these sites and monuments require different levels of attention for research and heritage preservation. Tourism oriented efforts can also help preservation, as attempted in the context of the Gorewada in Maharashtra (Pinjarkar 2018). Many of the unprotected archaeological mounds are destroyed day-by-day; and sometimes protected sites are also under threat; the case of Burzahom site of Kashmir which was used as a playground (Parvaiz 2019) may be cited here. The government may take measures for preservation in collaboration with the stakeholders, who live in the contexts of sites and monuments, by offering financial support. Several temples that are in dilapidated conditions do not have supporting population, but they have a lot of inscriptions and sculptures and protecting these sites remained problematic; and here, the local bodies and municipal corporations could be involved in the protection of these sites and monuments. Communities need to be involved in the protection of the archaeological sites and the example of local community's role in the preservation of the archaeological site of Bori (Maharashtra) with volcanic ash deposit is one of the best examples (Deshmukh 2018).

Heritage Legislations in India

India has several heritage laws and regulations adopted by the central and state governments (Biswas 1999) and only a brief survey is presented here. The Indian Treasure Trove Act, 1878, is one of the oldest acts to be in force and it takes care of preservation of treasure troves such as coin hoards and bronze images. The Ancient Monuments Preservation Act of 1904, which was modified into The Ancient Monuments and Archaeological Sites and Remains Act, 1958, (AMASR) has been further modified with Amendment and Validation Act of 2010. India enacted the Antiquities and Art Treasures Act of 1972 that regulates the trade and dealings in antiquities and art treasures. The AMASR Act has gained tooth in India after the court intervention leading to the protection of areas around the protected monuments; the provisions of this law have created many issues in the recent past, and the generable public are not happy with result of these provisions. Under

AMASR (Amendment and Validation) Act 2010, National Monuments Authority was constituted and constructions are prohibited within 100 metre from the monument, and the regulated area up to 200 metre. This development was possible primarily with the intervention of the Delhi High Court.

Despite the presence of the heritage legislations, preservation of the monuments has been affected by the implementation of the heritage laws, due to several social and political factors and the powerful pace of urbanisation, population pressures and scarcity of land. The cost of land and real estate developments has grown tremendously from the 1980s in India. A report of the Comptroller and Auditor General (CAG) of India noted that out of 1655 monuments, 546 were encroached upon (Lahiri 2017). There is one section seeking for the relaxation of the AMASR act, and there are others who strictly oppose the modifications suggesting that this would greatly affect the preservation of the sites and monuments. There is an urgent need to develop a comprehensive heritage management policy and review the existing legislations by involving many of the stakeholders. In the recent past, for historical and archaeological related issues, court intervention has become frequent in many contexts, and these instances have supported heritage management issues.

Cultural/Heritage Tourism

Tourism in fact contributes immensely to the economy of India and the majority of the tourists and pilgrims, both domestic and international, in India visit the cultural heritage sites and monuments in India. The foreign tourist arrivals in India from 2000 reveal a steep increase and the figures quadrupled as of 2018, suggesting the popularity of India among the international tourists. India currently stands in 40th position in global competitiveness in tourism. Domestic tourism is also equally important in a country like India where the mobility and circulation of the people give a great boost to the economy (Figs. 4 and 5). The increase in tourism figures definitely is suggestive of higher footfall at the heritage sites, leading to stress on the archaeological monuments and forcing heritage managers to develop appropriate strategies for crowd management.

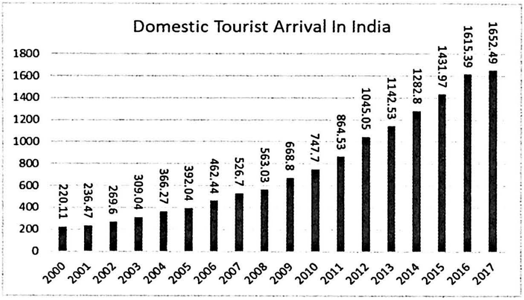


Fig. 4. Domestic Tourist arrival in India (in millions). Source: ITS 2017

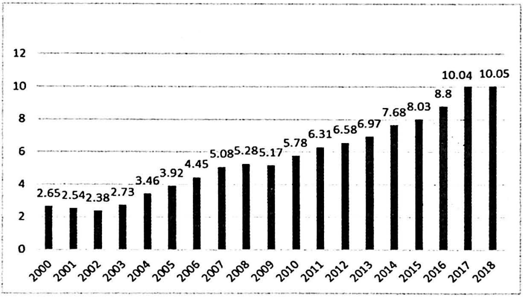


Fig. 5. Foreign Tourist Arrival in India (In millions) Source: FTA 2018

In this section, we briefly surveyed the current status of heritage management in India (see, Ota 2010, Selvakumar 2010; Lahiri 2017) and the following section presents some of the core issues concerning heritage management in India.

3. Heritage Management in India: Core Issues

Landscape Context and People-Centric Heritage Management

The concepts of environment context and landscape are very important in archaeological and historical research for understanding the functioning of cultures. When extended to heritage management, heritage managers become competitors to the local people, who use the environment and landscape for their essential existence-related needs. If we blindly apply the model of monuments in natural landscape contexts, without addressing the essential needs of people and living cultures, it becomes problematic. If the sites and monuments are bones, the communities are like flesh that combines to form a whole living organism. Therefore, a holistic and humane approach is essential in managing heritage resources. We need to understand the conditions, issues and needs of the local people while adopting heritage management approaches. A blind, idealistic approach that seeks to completely alienate the people away from the surroundings of the monuments is inappropriate and not viable. For example, the use of space around the temples site for markets is a tradition that existed in the olden times, and therefore we have to remove the perception of monument contexts without the contemporary people. For example, temples at Kasi, Mathura, Puri, Badrinath, Sri Rangam and Madurai have markets all around the temples and they may be viewed as interference by the pristine approach to the heritage management. These markets have functional value to the contemporary society and some of these markets along with the temples can be designated as heritage market area, and through such initiatives, the interests of the contemporary people and their livelihood sources can also be protected. Heritage education and awareness programmes addressing the stakeholders are very essential in the areas where there is heavy population in order to protect the monuments. This is where people centric heritage management is essential.

Heritage management process should also look into the landscapes, not just the monuments and here more interactions are necessary among the ASI, ministries of culture, environment and mining.

Localised, Problem-oriented Approach

The heritage planners need to take stock of the ground reality of the sites and monuments, while developing heritage management programmes for a region. One cannot expect a uniform approach to heritage management all across India. The protection of living monuments, for example, as at Jagannath Temple at Puri, the Meenakshi temple at Madurai, Venkateswara Temple at Tirupathi, and the Rock fort temple at Tiruchirappalli, would require a contextual approach and required facilities would have to be provided for the visitors. Protected monuments become irrelevant, if people do not visit or experience them. Many temples that are renovated out of interest on heritage and culture go out of use and are filled with bats,[2] since there is no local interest to visit and maintain worship, as a result of social transformations. Hence, different approaches are necessary for the protection of the living and archaeological monuments. The Pudumandapam market, which was in a heritage structure of Madurai, was burnt down in an accident, could be allowed to function; the traditional markets supporting people shall not be replaced. From the early times, fairs and markets have been associated with temple activities and festivals, and they provided easy access to the required goods for the people and the market for the sellers; but new markets could be banned in the places where they do not exist already.

Heritage, Tourism, and Development

Archaeological heritage is considered a resource for economic development through tourism. Unplanned tourism activities can be highly destructive to archaeological sites and their environment. Heritage resources can well be used for the development and support of a nation and the local communities. However, heritage should not be seen as a primary agency for social development, in all the contexts, and the development burden of a region cannot be directly placed on heritage resources alone. Hence, excessive tourism or developmental activities should be avoided in the context of heritage localities; especially the open-air sites and monuments where archaeological enthusiasts visit and make collections of artefacts. Heritage walk programmes should create proper awareness and the visitors should be restricted from the

2. See Note 3.

sensitive sites and monuments. Some of the overenthusiastic and self-interested individuals with inaccurate understanding, approach the popular media and do make frequent claims for publicity, and excessive tourism does harm to the heritage management attempts.

Heritage Preservation and People: Clash of Interests

The knowledge and traditions of the past and heritage are often used, reused, reinterpreted by the contemporary society in a myriad number of ways (Lowenthal 1985, 2015; Murphy *et al.* 2017; Silverman *et al.* 2017). The engagement of the past, inherited belief systems and cultural traditions and the nation, ethnic, religion and language centered identities of the present have been central to the contemporary geopolitics as exemplified by the political developments, conflicts and tensions in the globalised word. Heritage plays active part in nation building (Hole 2013), and may become a part of contention among various social groups (Selvakumar 2006; Varghese 2017). The litigations related to various archaeological sites and the intervention of court in several cases right from Ram Janmbhumi-Babri Masjid issue (Kapur 2014) to the excavations at Keeladi near Madurai (KHC 2018), Adichanallur (Chandar 2019), preservation of bronze images and the research at the site of Udayalur believed to the burial place of Chola king Rajaraja I (DTN 2019) could be cited as examples.

Archaeological conservation may clash with the economic interests and subsistence of the local people. People, primarily due to their economic needs and hereditary associations, do not want to part with the land property, and this may in turn lead to refusal of lands for research and heritage preservation. The heritage law places restriction on the activities around a monument; this in some sense has created dissension across the country. India is a country with heavy population and as a result people's livelihood interest clashes with the interest of archaeological conservation. Livelihood interests of the local people should not be affected due to heritage preservation, and higher compensation can be given for properties with heritage remains, if people have to be relocated under inevitable circumstances. For the fear of interference in their livelihood opportunities, people are against

the takeover of archaeological sites by the government agencies. This happened in 2012, in the case of the Sthalasayanaperumal temple at Mamallapuram, a historical heritage site with Pallava temples in Tamil Nadu (Srivatsan 2012; *The Times of India* 2012). As a result of public pressure, government did not declare the Sthalasayana Perumal temple at Mamallapuram as a national monument. There are instances where people live within the heritage sites. The example of Jaisalmer fort in Rajasthan where people have been living for hundreds of years in an appropriate example (Gupta 2009). There can be no debate that the heritage remains have to be preserved and protected; however, this process should not alienate the local people and stakeholders.

Lack of Heritage Management Perspectives

The ideas of heritage management and awareness have not penetrated sufficiently into the various levels of the system in India. Certain state governments view archaeology department as a non-income-generating institution, and as a result, there is insufficient focus on archaeological research and development activities. This is mainly due to the poor understanding of archaeological heritage and its importance among the concerned bureaucracy. Recruitment of professionals not trained in archaeology, heritage management or without management perspective is another factor contributing to the problems. In this context, orientation programmes and workshops are essential for motivating and improving the human resource involved in heritage management.

Education, Training and Heritage Management

Proper training of young professionals as heritage managers is essential for the effective management of heritage. There are very few dedicated research institutions for archaeological research in India. Archaeology programmes need to be restructured to incorporate heritage management perspectives, without diluting their core focus. Archaeologists and historians cannot keep away from the broader reality of heritage management issues and the social relevance of the subjects. At the level of human resource development, training on management perspectives have to be incorporated for the professionals coming from

different schools of thoughts. There could be a dedicated university developed for cultural heritage studies in India.

Educating the public, youth and school children about heritage is very important, in the context where social science education is considered as less in value by majority of the society, in view of its low-income generation potential. Archaeology and heritage studies can offer valuable alternate education models and skill enhancement components. These can help to develop the skills of the students and train them to develop their cognition at a very young age. Museums may be conceived more as outreach centres rather than the storehouses of antiquities and they can be used effectively for such heritage education initiatives. With the available information on ancient skill-sets, heritage, lithic studies, craft production and epigraphy, archaeology could be successfully used to train the students, right from the primary to the university levels, through the organisation of various workshops and training programmes. A supplementary diploma program in heritage management could be offered in the post-graduate programmes in archaeology and history to enhance the skills of the students and to make them more employable in various capacities related to heritage management.

Negative Effects of Heritage Tourism

Heritage becomes a commodity and means of existence in certain contexts, since it is approached with commercial interests. Heritage is recreated, reinterpreted and reinvented with commercial motives. Antiquity theft and faking of artefacts become inevitable with the development of heritage promotion through archaeology, museums and cultural tourism leading to commodification of heritage. While tourism supports conservation through monitoring, sometime it also causes damage. Tourists often do not understand the value and importance of cultural heritage. The recent activity of vandalism that involved the dislodging of pillars at Hampi is an example of tourism leading to the damage of heritage sites (*The Times of India* 2019). More active monitoring with technology and intense awareness programmes can help mitigate such negative impacts of tourism on the archaeological

sites. Creating heritage awareness among the young minds through changes in curricula could help to create positive influence.

Centralised Versus Localised Approach

A centralised approach to heritage management is not wholly viable and one cannot expect the ASI to be the sole caretaker of thousands of monuments across India. Heritage preservation in India is a monumental task and it cannot be achieved by the ASI alone, and more institutions and agencies have to become involved in the process. Heritage preservation should not only rely upon the government, but also through the efforts of communities and several agencies (Mahindra 2018). Nayanjot Lahiri observes "The ASI needs to reach out to municipal councils in towns, village panchayats, elsewhere, to get them involved in preserving some of this." (Kanga 2017). She (Kanga 2017) argues that "archaeology should be taken out of the corridors of the government and be given a much bigger place. From the corridors of political power to academic institutions and academic corridors, that's where archaeology will flourish." While the government may regulate to the heritage related activities, there is a need for more agencies to be involved in the heritage management process. Involvement and active participation of local agencies such as *panchayats*, municipalities and corporations, and private institutions in some context is a welcome attempt to reduce the financial and management burden on the government. Although the idea of preserving heritage through Corporate Social Responsibility (CSR) scheme as part of private participation exists, it has not gained popularity and its potential is under-utilised (Sen 2017). The recent involvement of private agencies in the maintenance and upkeep of the heritage sites is a welcome measure; but it has received criticisms and there have been suggestions on the formulation proper policies before adoption of such schemes (Jafa 2018; Sud and Jalan 2018). However, such decentralisation and private participation should be guided through proper heritage polices and frameworks, and strict monitoring. In fact, the state systems of medieval times had only limited interference on the local bodies and the tendency of strong state and centralisation were post-medieval period developments.

Indigenous traditions, Sciences and Digital and Social Media

Scientific studies and conservation practices focusing on indigenous approaches are essential for a meaningful management of heritage resources. Archaeology and heritage have reached a far wider audience thanks to the development of digital and social media. The online databases and atlases (Ross and Sobotkova 2009) have a better and faster reach, and are less expensive and easily accessible. The GIS enabled Historical Atlas Project of South India is an example of digital heritage resources and more such digital resources are essential for effective heritage management (Subbarayalu, in this volume) for database management and public outreach. Digital archiving is another area, where focus is required, and Sahapaedia and Google have begun to develop content in this area.

Finally, Disaster Management is one area where attention has to be paid especially in the context of old monuments in the disaster-prone areas. The floods of 2013 around Kedarnath and the Badrinath temple, the Puri Jagannath temple in the cyclone of 2019 (ASIJ 2019) and the damages to the monuments of Nepal in the earthquake of 2015 are in fact warnings for disaster preparedness. The task of managing old monuments in the current age is a highly difficult task and the ASI and the state archaeology departments have to equip themselves thoroughly to face the increased demands of the heritage management and the expectations from various sections of the society. The strength of professionals in the ASI and state archaeology departments needs to be increased to match these demands.

4. Conclusions

India is a region with distinct, interesting cultural and historical developments dating from the beginning of the Early Holocene, ca. 11000 BP. These developments have generated diverse clusters of tangible archaeological heritage sites and monuments all across the country.

The heritage sites and monuments of India are in various stages of preservation; a few with world heritage and national monument status are better preserved and there exist many unprotected sites and monuments. Some of the monuments are in thickly populated regions

where the land area is very scarce and the demands of contemporary land-use produce stress on the landscape in which the heritage sites and monuments are located. In certain instances, the monuments are located in remote, inaccessible areas and as a result of poor attention, these monuments get disintegrated due to ravages of time.

Managing the diverse heritage resources of the developing economy of India, which is a very densely populated nation, has been a daunting task that requires careful planning and implementation. Certainly, there is a need for developing more focused vision and perspective for effectively managing the heritage monuments of the country. Policymakers have to contemplate seriously and develop proper heritage management policies and programmes for managing the heritage resources from the grassroots to the national level. This compels for a comprehensive heritage policy taking diverse aspects and issues into consideration and by soliciting suggestions from various stakeholders.

Restructuring of the heritage related institutions operating at all these levels as well as the heritage management related academic programmes is essential after a thorough discussion and debate among the stakeholders. The focus of heritage management has to be shifted from the solitary monuments and sites to the broader contexts and landscapes. Overall, there should be an integrated approach and system that incorporates diverse perspectives including universally accepted procedures and values as well as indigenous approaches and local contexts and issues for better heritage management in India.

The fragmentation of academic disciplines that deal with the past into history, heritage, anthropology, archaeology, art and architecture, museology, Indology and literature which took place in the 19th and 20th centuries has contributed a major intellectual challenge. The narrow focus of the academic programmes in these disciplines and their syllabi do not contribute to any meaningful interdisciplinary perspective. These have added to the problems associated with the human resource that is essential for implementing holistic heritage management approaches. In addition to a holistic perspective on the past, training on heritage management requires understanding of anthropology, sociology,

economy and environment apart from conservation, architecture, urban planning and tourism. It is not out of context to cite Smith (2012) who argues that the current notion of archaeological heritage "constrains archaeological practice and the relationships archaeologists have with a range of publics, including Indigenous communities and peoples." The academic programmes need to refocus on their core concerns to produce well trained professionals.

The living heritage sites and monuments need to be visualised and preserved as an organic whole as part of an eco-cultural system. Sometimes a few of those in power may fail to grasp a holistic perspective of heritage management and may argue for complete evacuation of shops sellers of goods and commodities around the temples or other monuments that offer basic livelihood to the people by serving the pilgrims, visitors and tourists. An organic understanding of the temple-centred society and that the market around the temples that acted as economic hubs selling various daily needs in the medieval times is essential. Although mushrooming of plastic-selling shops should be regulated nearby the temples, heritage preservation should never seek to completely remove the people and communities from the vicinities of the monuments. There have been temples that are renovated through the investment of a huge sum, but to be occupied by bats,[3] since the supporting population has moved out of the temple surroundings to the urban centres for better economic prospects.

The concept of sustainability is a key factor to be considered in the investment of funds for conservation; if there is a lack of local support, the conserved monuments are bound to deteriorate even if huge sum is invested. It is a fact that the contemporary society does not view the temples as people did view and approach them in the early times. The socio-economic changes in fact have contributed to the transformation of the temples and the nature of the worship and belief systems. In the medieval rural system, the temples functioned as hubs of religious and economic activities; however, in the context of contemporary times the populations that moved to the urban centres, for better economic

3. While bats are considered bad for the buildings, there are studies pointing to their importance in the ecosystem (Umadi *et al.* 2019).

prospects, visit the temples periodically for festival and rituals. The revival of the temples, after the exodus to urban centres, in the rural contexts has been mainly through tourism and pilgrimage, festivals and various rituals; for example, the formation of Navagrasthalas in the region of Thanjavur region of Tamil Nadu in fact suggest the revival of traditions to suit the contemporary social and spiritual needs.

Finally, some possible ideas that could help manage the archaeological heritage of India better are offered below:

- Creation of a national database, documentation of heritage remains and creation of systems for rescue operations and regular monitoring are the need of the hour. Preparation of national inventory of monuments under the National Monuments Mission (NMMA), which was started in 2007, is not yet complete.
- Archaeological Survey of India has sought the support of ISRO for demarcating the area around the protected monuments and such use of technology is essential for heritage management; and in the same manner the communities and stakeholders should also be incorporated in the heritage management process.
- Developing comprehensive archaeological heritage management policies at the national and state levels and educating the various stakeholders associated with the heritage resources.
- Development of Cultural Resource Management as part of legislation, so that heritage sites in danger could be rescued when they face destruction as result of major road constructions and development projects.
- Coordination among the various national, state and local agencies for better heritage management at various levels.
- Creation of awareness and perspectives on heritage management and especially among the decision makers, mainly, politicians, bureaucrats, judges and local communities.

- Corporate Social Responsibility scheme has been used in India for the management of monuments under the Monument Mitra scheme. This scheme may be strengthened to offer support for archaeological excavations and rescue excavations by soliciting support from private firms.
- Sensitising the state governments to prioritising heritage management initiatives.
- Focus on heritage education and creating awareness among the school children and public.
- Offering new thrust to archaeological and heritage research activities through sufficient financial allocation for various agencies.
- Strengthening of academic programmes with the introduction of Heritage Management Diploma programmes, skill development programmes and workshops as add on programmes to the Post Graduate courses in history and archaeology.
- Employment of more professionals and offering training to human resource in the archaeology departments and heritage institutions.
- Filling up of all vacant posts in the central and state governments to strengthen the various departments to effectively tackle heritage management issues.
- Providing focus to train grassroots heritage workers (e.g. site watchers and guards of ASI).
- Connecting monuments, landscapes and the contemporary people for better heritage management.
- Creation of a network of institutions involving state government departments, museums and university departments, local bodies and corporations for heritage management initiatives.
- The university departments need not be seen only as agencies offering education and training. They could also be involved

in heritage management projects and application-oriented research and documentation programmes.

- Academic programmes in archaeology need to incorporate urban planning, heritage management, conservation, museology, social relevance and management perspectives as part of programme components.
- Use of digital technology for heritage documentation, GIS and satellite-based monitoring system for the remotely located monuments and sites.
- Archaeologists reaching out to people through news media and social media to disseminate accurate information on history and heritage, and to counter false information on cultural heritage.

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References

AISHE 2018. *All India Higher Education Survey 2017-18.* New Delhi: Ministry of Human Resource Development. Url: http://aishe.nic.in/aishe/viewDocument.action; jsessionid= DCE 0C648F9BBBEE 892DEE82A4D968275? document Id = 245, accessed May 2019.

Allchin, B., F.R. Allchin, B.K. Thapar (Eds.). 1989. *Conservation of the Indian Heritage.* New Delhi: Cosmo Publications.

Allchin, Raymond 1969. *Cultural tourism in India: its scope and development with special Reference to the Monumental Heritage: India - (Mission) May 1969.* Url: https://unesdoc.unesco.org/ark:/48223/pf0000008820_eng, accessed 25 April 2019.

ASIJ 2019. ASI tendered an apology to the Jagannath Temple Managing Committee for the damage to the temple in Puri. Url: https://www.odishanewstimes.com/2019/05/21/asi-tendered-an-apology-to-the-jagannath-temple-managing-committee-for-the-damage-to-the-temple-in-puri/. accessed May 2019.

Badhreenath, Sathyabhama. 2014. *Management of Living Heritage Sites with Special Reference to South India.* Ph.D. Dissertation. Pune: Deccan College Post Graduate Research Institute.

Baig, Amit 2003. Managing cultural significance. *Restoration and Renewal: A symposium on Preserving our Cultural Heritage*. India-seminar.com, 2003/530. Url: http://www. india seminar.com/2003/530/530%20amita%20baig.htm, accessed May 2019.

Bhat, Anagha Achyut 2016. *Sustainable Preservation of Cultural Heritage: A Study of People's Perceptions through Education and Modelling Approach.* Ph.D. Dissertation. Pune: Deccan College Post Graduate Research Institute.

Bhaumik, Anirban 2015. Proposed temple in Bihar may strain India-Cambodia ties. *Deccan Herald*, August 16, 2016. Url: https://www.deccanherald.com/content/495466/proposed-temple-bihar-may-strain.html, accessed May 2019.

Bhowmik, S.K. 2004. *Heritage Management: Care, Understanding and Appreciation of Cultural Heritage*. Jaipur: Publication Scheme.

Binumol Tom 2013. Jiirnnoddarana: The Hindu Philosophy of Conservation, in *Asian Heritage Management: Contexts, Concerns, and Prospects*, (Kapila D. Silva and Neel Kamal Chapagain Eds.), pp. 35-48. Routledge Contemporary Asia Series. Oxon: Routledge.

Biswas, S.S. 1999. *Protecting the Cultural Heritage (National Legislations and International Conventions)*. New Delhi: Aryan International.

Castillo, A. (ed.) 2014. *Archaeological Dimension of World Heritage: From Prevention to Social Implications*. Springer. Url: https://www.springer.com/in/book/9781493902828. accessed May 2019.

Chakrabarti, D.K. 1988. *A History of Indian Archaeology: from the Beginning to 1947.* Delhi: Munshiram Manoharlal Publishers.

Chakrabarti, D.K. 1990. *India: An Archaeological History*. Delhi: Oxford University Press.

Chakrabarti, D.K. 1997. Colonial *Indology: Socio politics of the Ancient Indian Past.* New Delhi: Munshiram Manoharlal Publishers.

Chakrabarti, D.K. 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947.* New Delhi: D.K. Print world (P) Ltd.

Chandar, B. 2019. Adichanallur site belongs to a period between 905 and 696 BC. Url: https://www.thehindu.com/news/cities/Madurai/adichanallur-site-belongs-to-a-period-between-905-and-696-bc-madurai-high-court/article26737779.ece, accessed May 2019.

Chang, T.C. 1997. Heritage as a Tourism Commodity: Traversing the Tourist–Local Divide. *Singapore Journal of Tropical Geography* 18(1): 46-68. https://doi.org/10.1111/1467-9493.00004.

Chapagain, Neel Kamal 2013. Contexts and Concerns in Asian Heritage Management, in *Asian Heritage Management: Contexts, Concerns, and Prospects,* (Kapila D. Silva, Neel Kamal Chapagain Eds.), pp.1-30. Routledge Contemporary Asia Series. Oxon: Routledge.

Cleere, Henry Ed. 1989. *Archaeological Heritage Management in the Modern World.* New York: One World Archaeology.

Darsana, S.B. and V. Selvakumar 2015. *Unprotected Archaeological Heritage of South India.* State of Built Heritage in India. Submitted to INTACH, New Delhi.

Desai, Gigna 2019. *Equity in Heritage Conservation: The Case of Ahmedabad, India.* London: Routledge. Routledge Research in Architectural Conservation and Historic Preservation. https://doi.org/10.4324/9780429468735.

Deshmukh, Chaitraly 2018. Sunshine story: Pune villagers come together to save volcanic soil from Indonesia. *Mid Day*. Dec, 12, 2018. https://www.mid-day.com/articles/sunshine-story-pune-villagers-come-together-to-save-volcanic-soil-from-indonesia/20088197, accessed May 2019.

Dhar, Parul Pandya 2018 The Many Lives of an Iconic Monument: Angkor Wat in Cross-cultural Imagination. *Caesurae: Poetics of Cultural Translation* 3 (1): 1-18.

Donovan, Andrew and Angela Donovan 2008. *The Hidden Oracle of India: The Mystery of India's Naadi Palm Reader.* Orient Paper backs.

DTN 2019 Extensive study on at Udayalur to identify Raja Raja Chola's burial site. *DT Next. 23 April 2019, https://www.dtnext.in/News/TamilNadu/2019/04/23033455/1115286/Extensive-study-on-at-Udayalur-to-identify-Raja-Raja-.vpf, accessed May 2019.*

Echo-Hawk, Roger and Walter R. Echo-Hawk 1994. *Battlefields and Burial Grounds: The Indian Struggle to Protect Ancestral Graves in the United States*. Minneapolis: Lerner Pub Group.

Falser, M. (ed.) 2015. *Cultural Heritage as Civilizing Mission: From Decay to Recovery.* Springer, https://www.springer.com/in/book/9783319136370, accessed May 2019.

FTA 2018. *Foreign Tourist Inflow in Dec 2018. http://tourism.gov.in/sites/default/files/FTA/Press%20Note%20FTAs%20Dec%2018.pdf.*

Gupta, Anika. 2009. Endangered Site: Jaisalmer Fort, India. Smithsonian Magazine. https://www.smithsonianmag.com/travel/endangered-site-jaisalmer-fort-india-52453028/, accessed May 2019.

Hole, Brian 2013. A Many-Cornered Thing: The Role of Heritage in Indian Nation-Building. *Journal of Intervention and State Building* 7 (2): 196-222 https://doi.org/10.1080/17502977.2012.714244, accessed May 2019.

Imam, Abu. 1966. *Sir Alexander Cunningham and the Beginning of Indian Archaeology.* Dacca: Asiatic Society of Pakistan.

IIC 2019. Are idols in icon centres suffering from 'bronze cancer', asks HC. *The Hindu.* Chennai, January 06, 2019. Url:https://www.thehindu.com/news/national/tamil-nadu/are-idols-in-icon-centres-suffering-from-bronze-cancer-asks-hc/article25922654.ece, accessed May 2019.

ITA 2019. International Tourist Arrivals Reach 1.4 billion Two Years Ahead of Forecasts. Press Release, PR No.: PR 19003, 21 Jan 19. Url: https://www2.unwto.org/press-release/2019-01-21/international-tourist-arrivals-reach-14-billion-two-years-ahead-forecasts

ITS 2017. India Tourism Statistics at a glance 2017. url:http://tourism.gov.in/sites/default/files/Other/english%20India%20Torurism%20Statics%20020917.pdf, accessed May 2019.

Jafa, Navina 2018. Heritage Monuments Need Preservation and Management Policies Before Adoption. The Wire.in. 22 May 2018, Url: https://thewire.in/culture/adopt-a-heritage-scheme-problems-and-solutions, accessed June 2019.

Jain, Shikha and Rima Hooja (Eds.) 2016. *Conserving Fortified Heritage: The Proceedings of the 1st International Conference on Fortifications and World Heritage, New Delhi, 2015.* New Castle Upon Tyne: Cambridge Scholars Publishing.

Jain, Shikha and Vanicka Arora 2017. Living Heritage of Mewar: Architecture of the City Palace, Udaipur. Ahmedabad: Mapin Publishing Pvt. Limited.

Jha, Gridhar 2015. Don't take our tourists! Cambodia complains to Centre over Bihar temple 'inspired by famous Angkor Wat shrine. *Daily Mail*, 2 June 2015, https://www.dailymail.co.uk/indiahome/indianews/article-3108047/Don-t-tourists-Cambodia-complains-Centre-Bihar-temple-inspired-famous-Angkor-Wat-shrine.html

Jokilehto, J. 2005. Definition of Cultural Heritage References to Documents in History, in *ICCROM Working Group - 'Heritage and Society* (J. Jokilehto, Selected). http://cif.icomos.org/pdf_docs/Documents%20on%20line/Heritage%20definitions.pdf, *accessed May 2019*.

Kanga, Surabhi 2017. "Archaeology Should Be Taken Out of the Corridors of the Government": Historian Nayanjot Lahiri on the ASI and Preserving Indian Heritage. *The Caravan*, https://caravanmagazine.in/vantage/historian-nayanjot-lahiri-asi-preserving-indian-heritage, accessed May 2019.

Kapur, Ratna 2014. The "Ayodhya" Case: Hindu Majoritarianism and the Right to Religious Liberty. 29 Maryland Journal of. International Law 305.Available at: http://digitalcommons.law.umaryland.edu/mjil/vol29/iss1/14, accessed May 2019.

KHC 2018. Keezhadi will rewrite history of the country, says High Court. *The Hindu*, November 2, 2018. Url: https://www.thehindu.com/news/national/tamil-nadu/keezhadi-will-rewrite-history-of-the-country-says-high-court/article25395842.ece, accessed May 2019.

Labrador, Angela M and Neil Asher Silberman 2018. Introduction: Public Heritage as Social Practice, in *The Oxford Handbook of Public Heritage Theory and Practice* (Angela M. Labrador and Neil Asher Silberman Eds). DOI:10.109?'

oxfordhb/9780190676315.013.32. New York, NY: Oxford University Press.

Lahiri, N. 1998. Coming to grips with the Indian Past: John Marshall's early years as Lord Curzon's Director-General of Archaeology in India - Part 1. *South Asian Studies* 14: 1–23.

Lahiri, Nayanjot 2000. Archaeology and Identity in Colonial India. *Antiquity* 74(285): 687-692. Url: https://doi.org/10.1017/S0003598X00060075, accessed May 2019.

Lahiri, Nayanjot 2012. *Marshalling the Past: Ancient India and its Modern Histories*. New Delhi: Permanent Black.

Lahiri, Nayanjot 2017. *Monuments Matter: India's Archaeological Heritage since Independence.* Mumbai: The Marg Foundation.

Lowenthal, David. 1985. *The Past Is a Foreign Country*. Cambridge, UK: Cambridge University Press.

Lowenthal, David. 2015. *The Past Is a Foreign Country—Revisited.* Cambridge, UK: Cambridge University Press.

Mahindra, Anand 2018. 'Heritage conservation should not be limited to govt or individuals.' Livemint.com. Updated: 18 Apr 2018, 03:04 AM IST. Url: https://www.livemint.com/Companies/GfA9jq8vEiUrgXoLBOtERN/Conserving-heritage-should-not-be-limited-to-government-or.html, accessed, June 2019.

Marshall, John. 1923. *Conservation Manual*. Delhi: Archaeological Survey of India.

Menon, A.G. Krishna 2015. Between the Colonial, the Global, and the Local—Civilizing India's Past under Different Regimes, in *Cultural Heritage as a Civilizing Mission - From Decay to Recovery,* (M. Falser Ed.), pp. 67-82. Routledge Heritage Series.

Menon, A.G. Krishna 2017. The Idea of Place in the Practice of Restoration and Replication in India., in *Authenticity in Architectural Heritage Conservation: Discourses, Opinions*, and Experiences in Europe, South and East Asia (Katharina Weiler and Niels Gutschow Eds.) pp. 87-92. Switzerland: Springer.

Muhammed, K.K. and S.B. Ota 2004.Management of Tourist Traffic by Sectorization at Bhimbetka, District Raisen, Madhya Pradesh. Paper presented in *the RASI-2004 International Rock art Congress* held at Agra.

Murphy, Alexander B., Michael Heffernan, Marie Price, David C. Harvey, Dydia DeLyser and David Lowenthal 2017. The Past Is a Foreign Country--Revisited. *The AAG Review of Books* 5 (3): 201-214. DOI: 10.1080/2325548X.2017.1315261, accessed May 2019.

Mustafi, Shatavisha 2016. The Acharya Jagadish Chandra Purakriti Bhavan at a glance. Url: https://www.sahapedia.org/the-acharya-jagadish-chandra-purakriti-bhavan-glance, accessed, June 2019.

Nagaraja Rao, M.S. 2001. The Concept of Jirnnoddhara. *Bulletin of the Deccan College Research Institute*. Pune: Deccan College Post-Graduate and Research Institute 60/61: 15–20.

Nanda, J.N. 1991. *Conflicts and Co-existence, India.* New Delhi: Concept Publishing.

Nanda, Ratish 2017. Humayun's Tomb: Conservation and Restoration, in *Authenticity in Architectural Heritage Conservation: Discourses, Opinions*, and Experiences in Europe, South and East Asia (Katharina Weiler and Niels Gutschow Eds.) pp. 93-114.Switzerland: Springer.

Ota, S.B. 2004. Tangible and Intangible: An Integrated Approach to Heritage Management at Bhimbetka. Paper presented in

The RASI-2004 International Rock art Congress held at Agra.

Ota, S.B. 2005. Declaration of Painted Rock Shelters of Bhimbetka as World Heritage and its Management Initiatives.*Purakala* 14–15: 83–88.

Ota, S.B. 2006. An Integrated Approach to Heritage Management: A Case Study at Bhimbetka, in *International Conference on the Safeguarding of Tangible and Intangible Cultural Heritage: Towards an Integrated Approach-Proceedings*. pp. 148–156. Nara: UNESCO.

Ota, S.B. 2010. Archaeological heritage management in India, in *Cultural* Heritage Management*: A Global Perspective*, (P. M. Messenger, and G.S. Smith Eds), pp. 82-98. Gainesville: University of Florida.

Paddayya, K. 1990. *New Archaeology and Its Aftermath: A view from Outside the Anglo-American World.* Pune: Ravish.

Paddayya, K. 2004. *Recent Studies in Indian Archaeology.* Indian Council of Historical Research Monograph, 6. New Delhi: Indian Council of Historical Research.

Paddayya, K. 2014. *Multiple Approaches to the Study of India's Early Past: Essays in Theoretical Archaeology.* New Delhi: Aryan Books International.

Paddayya, K. 2016. *Revitalizing Indian Archaeology: Further Theoretical Essays.* New Delhi: Aryan Books International.

Paddayya, K. 2017. *Methodological Issues in Indian Archaeology.* New Delhi: Aryan Books International.

Paddayya, K. 2018. *Indian Archaeology and Heritage Education: Historiographical and Sociological Dimensions.* New Delhi: Aryan Books International.

Pai, Gita V. 2016. Producing Heritage: Culture as Commodity in Madurai. *International Journal of Tourism Anthropology* 5(1/2): 47-70.

Pappu, Shanti, Kumar Akhilesh, Sudha Ravindranath and Uday Raj 2010. Applications of satellite remote sensing for research and heritage management in Indian prehistory. *Journal of Archaeological Science* 37(9):2316-2331. Url: https://doi.org/10.1016/j.jas.2010.04.005

Parvaiz, Athar 2019. Abusing the Past: Burzahom Archaeological Site Vandalised. *Kashmir Observer*, 25 January 2019. Url: https://kashmirobserver.net/2019/feature/abusing-past-burzahom-archaeological-site-vandalised-32943, accessed May 2019.

Pavananti 1995. *Nannul, a Perceptive and Comprehensive Translation in English*. Madurai: M.K. Sripathi. 1995 Edition.

PIB 2018. 3686 centrally protected monuments/sites under the Archaeological Survey of India: Dr. Mahesh Sharma. 12 March 2018. Url: http://pib.nic.in/newsite/PrintRelease.aspx?relid=177335, accessed 30th April 2019.

Pinjarkar, Vijay. 2018. Gorewada Archaeological Theme Park. Times of India. Dec 31, 2018. Url: http://timesofindia.indiatimes.com/articleshow/67315259.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Platzman, Steven 1992. Objects of Controversy: The Native American Right to Repatriation. *American University Law Review* 41(2): 517-558.

Pratap, A. 2014. Indian Archaeology and Postmodernism: Fashion or Necessity? *Ancient Asia* 5: 2: 1-4, DOI: http://dx.doi.org/10.5334/aa.12318, accessed, 28 February 2019.

Prideaux, B. 2003. Commodifying heritage: loss of authenticity and meaning or an appropriate response to difficult circumstances? *International Journal of Tourism Sciences* 3(1): 1–15.

Prideaux, B., and D. J. Timothy 2008. Themes in Cultural and Heritage tourism in Asia and the Pacific, in *Cultural and Heritage Tourism in Asia and the Pacific,* (B. Prideaux, D. J. Timothy and K.S. Chon Eds.), pp.1-14. New York: Routledge.

Ray, H.P. 2018. *Decolonising Heritage in South Asia: The Global, the National and Transnational.* New Delhi: Routledge India.

Ray, Rajat 2009. Policies and Principles of Conservation of Architectural Monuments in British India, in *Archaeology in India Individuals, Ideas and Institutions*, (Gautam Sengupta and Kaushik Gangopadhyay Eds.) pp. 350-364. Delhi: Munishiram Manoharlal.

Rosen, L. 1980. The Excavation of American Indian Burial sites: A Problem in Professional Responsibility. *American Anthropologist* 82: 5-27.

Ross, S. and A. Sobotkova 2009. An 'Encyclopedia of Archaeological Heritage'? The Encyclopedia of Life as a model for digital cultural atlases, in *Space, Time, and Place 2009: The Third International Conference on Remote Sensing in Archaeology, 17th–21st August, Tiruchirappali, India,* (S. Campana, M. Forte and C. Liuzza Eds.), pp. 399–406. BAR International Series S2118. Oxford: Archaeopress.

Selvakumar, V. 2006. Public Archaeology in India: Perspectives from Kerala. *India Review* 5(3-4): 417-446.

Selvakumar, V. 2009. Issues in Current Archaeological Research on Human-Environment Interactions: Perspectives from South Asia. *Archaeological Review from Cambridge* 24(2):9-26.

Selvakumar, V. 2010. The use and relevance of archaeology in the post-modern world: Views from India. *World Archaeology* 42(3):468-480.

Selvakumar, V. 2012-13. Heritage Management Plan for the. Rājarājīswaram, The World Heritage Monument at Thanjavur: A Few Suggestions. *Tamil Civilization* 24(3-4): 124-130.

Sen, Sohini 2017. Heritage conservation yet to find favour with firms for CSR spend. Livemint.com. Updated: 24 Feb 2017, 03:55 AM IST, Url: https://www.livemint.com/Companies/EC3Ui9vxZ538PGfCOFmbsI/Heritage-conservation-yet-to-find-favour-with-firms-for-CSR.html, accessed, June 2019.

Sengupta, Indira 2013a. Monument Preservation and the Vexing Question of Religious Structures in Colonial India, in *From Plunder to Preservation. Britain and the Heritage of Empire, c. 1800-1940*, (Astrid Swenson and Peter Mandler Eds.), pp. 171-85. Oxford.

Sengupta, Indira 2013b. A Conservation Code for the Colony: John Marshall's Conservation Manual and Monument Preservation between India and Europe, in *Archaeologizing Heritage?*, (Michael Falser and Monica Juneja Eds.) 21-37. Berlin.

Sengupta, Indira 2015. Culture-keeping as State Action: Bureaucrats, Administrators, and Monuments in Colonial India. *Past and Present* 226, suppl. 10: 153-177.

Shanks, M. and C. Tilley 1992. *Re-Constructing Archaeology Theory and Practice.* Second Edition. London: Routledge.

Silva, Kapila D. 2016. Paradigm Shifts in Global Heritage Discourse. KUscholar Works-Architecture and Design Scholar Works. Url: https://kuscholarworks.ku.edu/handle/1808/21181, accessed May 2019.

Silva, Kapila D. and Neel Kamal Chapagain (Eds.) 2013. *Asian Heritage Management: Contexts, Concerns, and Prospects.* Routledge Contemporary Asia Series. Oxon: Routledge.

Silverman, Helaine 2014. Heritage Theory, in *Encyclopedia of Global Archaeology 2014 Edition*, (Claire Smith Ed.), DOI: https://doi.org/10.1007/978-1-4419-0465-2_287.

Silverman, Helaine, Emma Waterton and Steve Watson (Eds.) 2017. *Heritage in Action Making the Past in the Present*. Springer. Url: https://www.springer.com/in/book/9783319428680, accessed May 2019.

Singh, Upinder 2004. *The Discovery of Ancient India: Early Archaeologists and the Beginning of Archaeology*. Delhi: Permanent Black.

Singh, Upinder 2009. Alexander Cunningham's Contributions to Indian Archaeology, in *Archaeology in India Individuals, Ideas and Institutions,* (Gautam Sengupta and Kaushik Gangopadhyay Eds.), pp. 60-75. Delhi: Munishiram Manoharlal.

Smith, L. 2004. *Archaeological Theory and the Politics of Cultural Heritage.* London: Routledge.

Smith, L. 2006. *Uses of Heritage.* London: Routledge.

Smith, L. 2012. Discourses of Heritage: Implications for Archaeological Community Practice. *Nuevo Mundo Mundos Nuevos* [En ligne], Questions du temps présent, mis en ligne le 05 octobre 2012, consulté le 15 mai 2019. Url: http://journals.openedition.org/nuevomundo/64148; DOI: 10.4000/nuevomundo.64148, accessed May 2019.

Smith, L. and Waterton, E. 2012. Constrained by Common Sense: The Authorised Heritage Discourse in Contemporary Debates, in *The Oxford Handbook of Public Archaeology*, (J. Carman, R. Skeates and C. McDavid Eds.), pp. 153-71. Oxford: Oxford University Press.

Srivatsan, A. 2012. Monumental Mismanagement. *The Hindu.* Url: https://www.thehindu.com/features/friday-review/history-and-culture/monumental-mismanagement/article3525121.ece, accessed May 2019.

Sud, Shahan and Meghna Jalan 2018 Can Our Heritage Be Leased out for Short-Term Political Gain? https://thewire.in/government/adopt-a-heritage-dalmia-group-red-fort , accessed June 2019.

TAH 2018. The Age of Humans: Evolutionary Perspectives on the Anthropocene. www.humanorigins.si.edu, accessed May 2019.

Ternhag, Gunnar 2006. The Story of the Mora-Harp. Museumization and De-museumization. *STM Online* 9. Url: http://musikforskning.se/stmonline/vol_9/ternhag/ternhag.pdf, accessed April 2019.

Thakur, Nalini. 2007. Hampi World Heritage Site: Monuments, Site or Cultural Landscapes? Cultural Landscapes: Preservation Challenges in the 21st Century. *Journal of Landscape Architecture* 16: 31-37.

Thakur, Nalini. 2010. Indian Cultural Landscape, its protection and Management through Cultural and Historic Urban Landscape concepts. *Landscape Journal* 7(4): 24-29.

Thakur, Nalini. 2011. Indian Cultural Landscapes: Religious pluralism, tolerance and ground reality. *Journal of SPA: New Dimensions in Research of Environments for Living "The Sacred,"* no. 3, Monsoon. Url: https://architexturez.net/doc/az-cf-21175, accessed May 2019.

Thapar, B. K. 1984. India, in *Approaches to the Archaeological Heritage Management in the Modern World*, (Henry Cleere Ed.), pp. 63-72. Cambridge: Cambridge University Press.

Thapar, Romila 2018. *Indian Cultures as Heritage: Contemporary Pasts.* New Delhi: Aleph Book Company.

The Hindu 2012. Mamallapuram temple has no heritage value: MP. *The Hindu*, Chennai Edition. July 17, 2012. Url: https://www.thehindu.com/news/cities/chennai/mamallapuram-temple-has-no-heritage-value-mp/article3646854.ece, accessed May 2019.

The Times of India 2012. Mamallupuram erupts in protest against government proposal to takeover temple. *The Times of India.* Url: https://timesofindia.indiatimes.com/india/Mamallupuram-erupts-in-protest-against-government-proposal-to-take-over-temple/articleshow/14053089.cms, accessed May 2019.

The Times of India 2019. 4 held for Hampi vandalism, say they did it 'in excitement.' *Times of India*. Feb 8, 2019. Url: https://timesofindia.indiatimes.com/city/bengaluru/4-held-for-hampi-vandalism-say-they-did-it-in-excitement/articleshow/67893594.cms, accessed May 2019.

The Venice Charter 1964. The Venice Charter 1964. url: https://www.icomos.org/charters/venice_e.pdf, accessed 28 April 2019.

Umadi, Ravi, Sumit Dhookia and Jens Rydell 2019. The Monumental Mistake of Evicting Bats from Archaeological Sites—A reflection from New Delhi. *Heritage* 2: 553-567.

UNWTO 2009. *UNWTO Tourism Highlights 2009 Edition.* https://www.e-unwto.org/doi/pdf/10.18111/9789284413591, accessed May 2019.

UNWTO 2018. *UNWTO Tourism Highlights 2018 Edition.* https://www.e-unwto.org/doi/pdf/10.18111/9789284419876, accessed May 2019.

Varghese, R. 2017. Archaeology and Its Public(s): Thinking through Archaeology-Public Relationship. *Heritage (Journal of Multidisciplinary Studies in Archaeology)* 5: 56-68.

Venkatachalapathy, A.R. 2005. 'Enna Prayocanam?' Constructing the canon in colonial Tamilnadu. *The Indian Economic and*

Social History Review 42(4): 535-553.

Venkatraman, Namrata. 2009. *Pattern Approach to Architectural Conservation: A Temple Town in India.* Ph.D. Dissertation. University ofTexas. Url: http://hdl.handle.net/2152/22574, accessed May 2019.

Vijaya Kumar, S. 2018. *The Idol Thief.* www.juggernaut.in.

Weiler, Katharina 2017. Contested Evaluations: Authenticity and the "Living Traditions" of Master Builders and Stonemasons in India, in *Authenticity in Architectural Heritage Conservation: Discourses, Opinions*, and Experiences in Europe, South and East Asia (Katharina Weiler and Niels Gutschow Eds.) pp. 127-168. Switzerland: Springer. Url: https://link.springer.com/book/10.1007/978-3-319-30523-3, accessed May 2019.

Wells, J.C. Arch 2017. Are We "Ensnared in the System of Heritage" Because We Don't Want to Escape? *Archaeologies* 13 (1): 26-47. Url: https://doi.org/10.1007/s11759-017-9316-8, accessed May 2019.

WHC 2019. India. UNESCO World Heritage. Url:https://whc.unesco.org/en/statesparties/in, accessed 30th April 2019.

Winter, Tim. 2014. Heritage Studies and the Privileging of Theory. *International Journal of Heritage Studies* 20 (5): 556-572.

Winter, Tim and Emma Waterton 2013. Critical Heritage Studies. *International Journal of Heritage Studies* 19(6):529-531, DOI: 10.1080/13527258.2013.818572, accessed May 2019.

Wu, Z. and Hou, S. 2015. Heritage and Discourse, in *The Palgrave Handbook of Contemporary Heritage Research* (E. Waterton and S. Watson Eds), pp.37-51. London: Palgrave Macmillan.

16. Historical Atlas of South India and Heritage Management

Y. Subbarayalu

Abstract

The Digital Historical Atlas of South India, which is available on the website of the French Institute of Pondicherry (FIP) for the past one decade, was primarily meant to be used as an educational tool in teaching history. It has, however, a lot of potential for educating laymen as well as specialists in the rich cultural heritage of South India. Its inbuilt query system provides much scope for various pedagogic uses. This is explained in this paper with reference to the mapping of religious centres.

Keywords: Digital Archaeology; Heritage Management; Historical Atlas of South India; Heritage Documentation

Teaching history using maps is a usual pedagogic procedure. Hence historical atlas is a convenient tool for history teachers and students. There exist several printed versions of historical atlases for Europe, North America, Canada, China and Southeast Asia. For example, for India and the neighbouring countries we have a monumental work, *A Historical Atlas of South Asia*, edited by J.E. Schwartsberg and published by University of Chicago Press in 1978. Then there are such special works as the *Atlas of the Mughal Empire* (1982) by Irfan Habib, and the recent publication of *Atlas of Ancient Indian History* (2012) by Irfan Habib and Faiz Habib and *An Annotated Archaeological Atlas of West Bengal* (2005) by B.D. Chattopadhyaya and others.

Web-based digital atlas, is, however, a recent development even in Western countries, like *the Digital Atlas of Roman and Medieval Civilizations.* As far as India is concerned, the first successful venture is *the Historical Atlas of South India* (from prehistoric times to CE 1600), which was produced by the French Institute of Pondicherry in collaboration with four South Indian Universities, namely Tamil University of Thanjavur, Mahatma Gandhi University of Kottayam, University of Mangalore and the Central University of Hyderabad.

A big team of historians, archaeologists and geographic information system (GIS) experts was involved in the preparation of the atlas during 2005–2008. The digital version of this atlas was launched in late 2008 and is now available on the website of the French Institute of Pondicherry (http://www.ifpindia.org/hatlas/).

The atlas was prepared using the latest GIS technology. Its geographical coverage includes present states of Tamil Nadu and Kerala and two pilot areas in the states of formerly Andhra Pradesh (now Andhra Pradesh and Telangana) and Karnataka. It covers the time range from prehistoric times to AD 1600 and is organised into seven major periods and under four major knowledge themes (political, social, economic and cultural). Altogether, there are at present 7000 sites of archaeological and historical importance put on the maps with all the related theme-based information. Facilities are provided to navigate through, and interact with, by querying, the entire database by time, space and themes. Maps have been illustrated by two different versions, namely Scalable Vector Graphics (SVG) version and Google Earth version.

The atlas holds a great potential for educating laymen as well as specialists in the rich cultural heritage of South India. Its inbuilt query system has much scope for various pedagogic uses. This may be explained with reference to the mapping of religious centres. Information relating to the religious centres of various creeds like Saiva, Vaishnava, Jaina or Buddha in Tamil Nadu and Kerala is available from the 7th century onwards both from literary and archaeological sources. Those centres have undergone changes by way of expansion, renovation and also desertion over the centuries. While many of them have survived through some structural remains like temples, many have also disappeared due to neglect and other reasons. Some of these latter centres, however, can be recognised through some stray archaeological evidence like loose sculptures and also by way of place names. As the primary objective of the atlas is to understand and explain the historical changes, care has been taken to map the spots of all archaeological data, including loose and stray sculptures, without reference to their superficial importance. As far as the digital atlas is concerned any

number of points, representing the ancient sites, may be put on the maps without the problem of cluttering. This is because the digital maps, unlike the printed maps, can be zoomed in to a large extent without loss of details. In the Pudukkottai area, where a thorough survey was made before mapping, sites of loose sculptures were also recorded. Interestingly many of these sculptures belong to non-orthodox creeds, Jaina and Buddha, indicating the popularity of those creeds in the past society (prior to the 12th century) of the locality (Map 1). That means they are part of the cultural heritage of the area. If we go only by the surviving structural remains, this important heritage would have never seen the light of day.

Compared to the Pudukkottai area, the map of the Kaveri delta included in the atlas does not show any Jaina and Buddha centres (Figs. 1 and 2), whereas it is seemingly rich in the orthodox religious centres. The reason is the problem of insufficient documentation. No record of stray sculptures was systematically made for this area as in the case of the Pudukkottai area (Fig. 3.). Such stray sculptures are, however, found in the Kaveri delta and in other areas too. In view of their importance, they have been documented in the last couple of years by the researchers of the French Institute of Pondicherry. They have to be added thereafter to the Historical Atlas as they corroborate the evidence from inscriptions, which vouch for the popularity of the Buddha and Jaina religions in the medieval period, say up to the 11th century. It is found that by 11th century the non-orthodox religions lost much of the earlier royal patronage. Several land gifts that had been in the possession of the *Paḷḷis* (Jaina and Buddha religious centres) are found to be resumed (denoted by the term *tiṟappu*) and converted for other purposes.[1] Those religions seem to have been abandoned or ignored thereafter due to changed socio-political circumstances, which of course would require an independent study. Anyway, the above information supports the fact that the Historical Atlas provides much scope for understanding the vicissitudes of religious and cultural heritage over time.

1. There are several references to this aspect in the 11th-century Chola copper-plate grants, like the Karandai grant. K.G. Krishnan, ed., *Karandai Tamil Sangam Plates of Rajendra Chola I*, New Delhi: ASI, 1984, pp. 212–213.

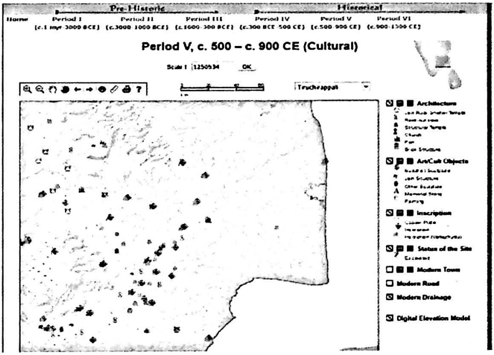


Fig 1. Jaina centres in the Pudukkottai area (Source : author)

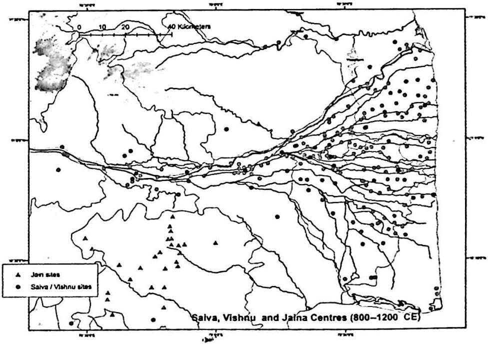


Fig. 2. Religious centres in the Pudukkottai area and the Kaveri Delta. (Source : author)

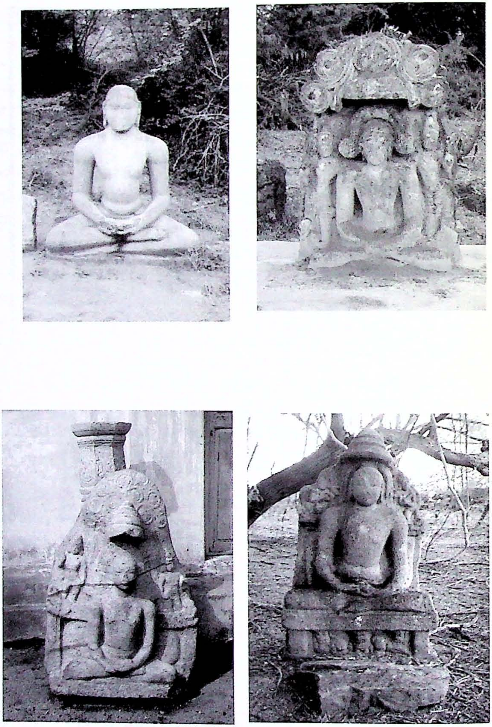


Fig. 3. Loose sculptures of Jaina and Buddha affiliation (in Pudukkottai area) (Source : author).

17. Heritage Management Issues of the Shore Temple, Mamallapuram, and the Airavateswara Temple, Darasuram: A Case Study

A.M.V. Subramanyam and S. Vetriselvi

Abstract

Heritage is the legacy of physical artefacts and intangible attributes of a group or society that is inherited from the past generations. Cultural heritage management is traditionally concerned with the identification, interpretation, maintenance and preservation of significant cultural sites and physical heritage assets, i.e. monuments, apart from the intangible aspects of heritage such as culture, tradition and languages. The Archaeological Survey of India (ASI) is a premier institution in the country tasked with the identification, interpretation, maintenance and preservation of significant cultural sites and monuments. This paper deals with heritage management issues of the monuments under the jurisdiction of ASI, more particularly pertaining to the case studies of Shore Temple at Mamallapuram and Airavateswara Temple at Darasuram in Tamil Nadu.

Keywords: Heritage Management; Conservation; Mamallapuram; Darasuram

Introduction

Cultural heritage includes the tangible and intangible aspects and also components of natural heritage associated with a particular group or society, which is inherited from the past generations. In India, more than 3680 ancient monuments, archaeological sites and remains of national importance are under the administration of the Archaeological Survey of India (ASI), the nodal agency for managing the heritage sites and monuments of India. There are 411 centrally protected monuments and sites under the jurisdiction of Chennai Circle of the ASI. The primary objective of ASI is to preserve and conserve the country's cultural heritage for the benefit of the future generations

(Marshall 1923; Lal 1953). In the recent decades, the subject of heritage management has received more attention due to rapid growth of urbanisation, cultural tourism and several other developments in the global context. The protective management of standing monuments and historic sites depends upon the knowledge of geological sub-surface conditions of sites and monuments and the human-induced processes that affect the stability and degradation of these cultural vestiges.

Group of Monuments, Mamallapuram

The group of monuments at Mamallapuram dating back to as early as the 7th century CE (Srinivasan 1958, 1964) is one of the important architectural edifices of India. Located close to the east coast of India and within the urban sprawl of the metropolitan city of Chennai, these monuments face the onslaught of both natural and human agencies.

It is a well-known fact the Sangam Tamil and other early literary works refer to many types of temples, presumably built using perishable materials such as wood, bricks, mortar and with stucco or painted images as objects of worship (Srinivasan 1983a: 11). Stone was mainly used for funerary practices in Tamil Nadu in the Iron Age and as such it was not preferred for religious edifices in the early period. This trend was perhaps changed by the Pallava king Mahendravarman I (c. 580–630 CE) with the excavation of a cave-temple at Mandagapattu near Villupuram as attested by the famous inscription there (EI, XXVII: 14ff) referring to the traditional construction materials. Perhaps the early Pandyas too ventured into creating rock temples in the early period. This tradition of scooping rock-cut caves was continued by Mahendravarman's successors too. During the reign of his son Narasimhavarman I (c. 630–668 CE), the whole architectural activities were confined mainly to Mahabalipuram (or Mamallapuram). In addition to the tradition of excavating cave temples, monoliths and structural temples were also patronised by Narashimavaraman I and Narashimhavarman II (Rajasimha), respectively.

Mamallapuram (12° 37' 36.937"; N 80° 11' 33.76" E) is located 45 kilometre from Chennai on the East Coast Road, in

Thirukazhukundram taluk of Kanchipuram district. The temples in this coastal town represent the crucial phase in the development of religious architecture of Tamil Nadu. It has been famous as a sea-port even from the beginning of the Common Era. The modern name Mamallapuram, 'the city of Mamalla', derives from a title of Narasimhavarman I (ca 630–670CE), the great Pallava ruler of the 7th century, who was responsible for erecting most of rock-cut cave temples at this place.

The monuments of Mamallapuram could be divided into two groups; (i) those forming part of the natural charnockite formation like the cave temples, monolithic temples and the bas-relief, and (ii) the structural temples, particularly the Shore Temple and Mukund Nayanar and Olakkannnesvara temples. The different types of rocks of softer and less compact textured raw materials were used for early construction. The leptinite reddish sandstone and whitish grey granite stone blocks were used for the construction of Shore Temple (Narasimhaiah 1995). In 1984, this group of monuments at Mamallapuram was declared as World Heritage Monument by the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

Shore Temple, Mamallapuram

The shore temple *(Alaivay-k-kovil)* is built on the shore, a few feet away from the sea. On plan the temple consists of three shrines, one behind the other. The main cell (the Ksatriyasimhesvara), facing east enshrines a fluted Siva-linga, and the other facing west (the Rajasimhesvaram) also has a fluted Siva-linga. Behind the Siva-linga, there is a bas-relief panel representing Somaskanda which is also repeated on the either side on the walls of the porch. The walls of the cells have traces of lime plaster. There are rampant lions at intervals dividing the carved panels of the outer walls of the temple; of which many have been obliterated by the continuous spray of sea-water. In between these two Siva temples, is a third shrine (the Narapatima Pallavagriham) containing a large image of Vishnu in form of *anantasayana*. The superstructure of the Kstraiyashimesvaram is large than that of Rajashimesvaram and it also has an additional prakara of low height with small gopura-dvara at the east. The whole temple

complex is surrounded by an enclosure along with rows of sculpted Nandis arranged on the top. Opposite to this temple, at some distance, is a *balipitha* and the pedestal of a *dhvaja-stambha.*

Causes of Decay

Since the rock-cut cave temples and *rathas* are part of the natural formation, there are no structural problems as such. The stone used for construction of Shore Temple is identified as leptinite (Srinivasan 1983: 56), porphyritic in texture with indistinct to well-developed foliation. The chief mineral constituents are quartz, feldspar and biotite with small amounts of accessory minerals such as magnetite apatite, garnet, sphene and zircon. However, granite was used only for the *pattika* moulding of the *adhishtana* with a specific purpose of serving as a damp roof course besides taking the load and its even distribution on the plinth. The monument did not have much structural disturbance owing to the solid foundation over the bedrock. The lashing waves and direct contact with the saline wind and also due to capillary action, the soluble salts from atmosphere and the ground are being deposited continuously on the surface of the stones. The accompanying pressure, and heat and cold at alternate intervals in course of a continuous dissolution and re-crystallisation of salt cause stress, leading to the exfoliation of the upper surface, resulting in a fragile, porous and even powdery over matrix. As a result of this dual action the features of the sculptures and other ornamentations face a higher degree of erosion. Another problem is the accumulation of drift-sand all around the monument (Narasimhaiah 1995).

Conservation Efforts of ASI

The earliest reference to a conservation measure of a monument of Mamallapuram is found in Dandin's *Avanti-sundari-katha-sara* (Sastri 1946) and it mentions that the author was invited to inspect the restoration of a broken hand of the *Anantasayi* image at Mamallapuram. During 1880–83, the Government of Madras Presidency, through its public works department carried out several works at Mamallapuram like the removal of drift sand in the vicinity of the five *rathas*. Alexander

Rea made a remarkable contribution to the conservation of monuments in Mamallapuram, in particular the Shore Temple. In 1905–06, the *mahadvara* of the Shore Temple was reconstructed and the see-through joints of the masonry were pressure grouted and pointed. Further in 1906–07, a further excavation of the buried structures was carried out on the western side of the Shore Temple. Rea provided approach pathways to the monuments (Fig. 1).

Following the reorganisation of the survey by Wheeler, the structural conservation was transferred to the survey itself. Nevertheless, 1940s was an important decade for Mamallapuram. By then, it had become certain that the monument's surrounding had deteriorated because of sea inclusion. The best method that was perceived suitable at that point of time was the construction of a groyne-wall well inside the sea to prevent inroads into the sediment in the context of the monument. The effort to construct a groyne wall was started in 1939–40 by dumping 2 ft cube concrete blocks on the north-eastern side of the temple. The wall took its present shape in the early 1980s. The casuarina trees were also planted inside the line of groyne wall to control the speed of the wind.

Even though the periodical chemical treatment is being provided like paper pulp treatment to the surfaces, due to salt crystallisation action, the effect of erosion is so high that in ranges from few centimetre to 20 centimetre, thereby reducing the structure to critical balance at few locations. At most of the places, sculptures have been eroded to the base level, making it difficult to recognise the original features (Fig. 2).

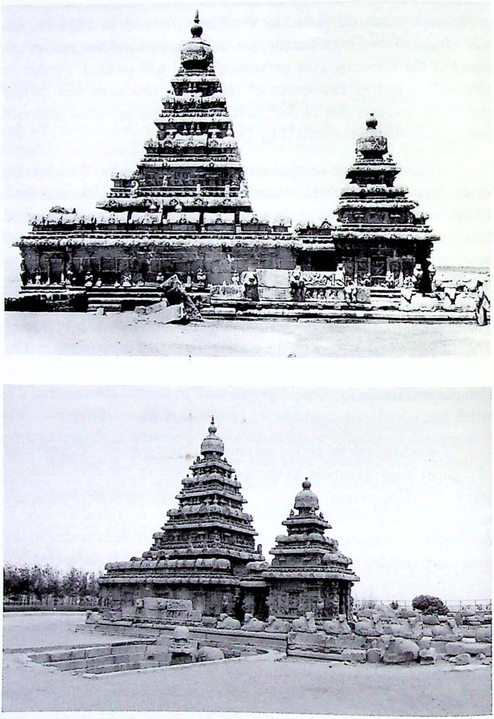
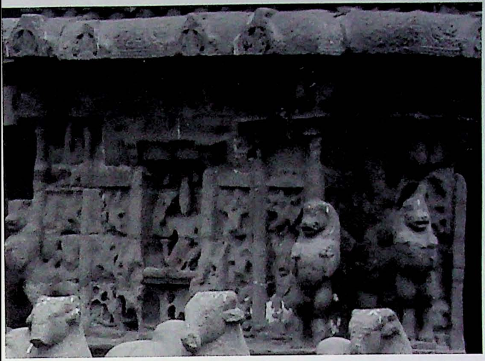
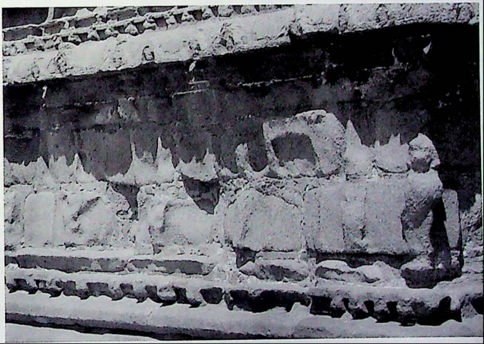


Fig. 1 a, b. Shore temple then and now at Mamallapuram
(Source : ASI)





Recently, the ASI, Chennai Circle, Chennai, made a trail patch in the south-eastern corner of *adhishtana* to counter the deterioration by applying the superficial layer of lime plaster with suitable fine aggregates where the loss of surfaces is around 3 cm. Where the loss of surface is beyond 10 cm, the appropriate sized stone blocks have been fixed for which, if required stainless steel pins and mesh were used.

Another two important problems are mass tourism and rapid growth of the town, due to urbanisation. Though tourism is an important factor that significantly contributes to the development of national economy, it also affects the heritage sites by negative effects such as pollution, changes on environment and destruction of landscapes. In Mamallapuram, during the last five years, the tourist inflow has remained more than a million mark (Fig. 3).

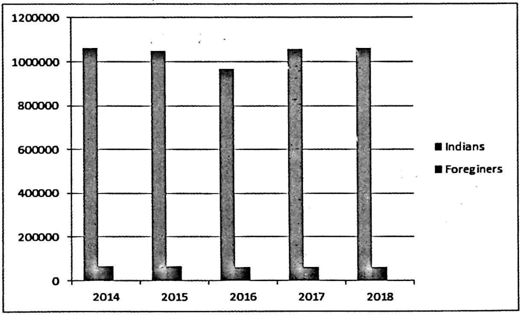


Fig. 3. Tourist inflow at Mamallapuram during last five years, (Source : ASI)

To get rid of all these negative issues, the ASI, Chennai Circle, is monitoring tourist activities at the heritage sites, especially in the Shore Temple, by restricting the tourists entering the monument. The construction/mining activity has been controlled in and around the

monument, i.e. protected, prohibited and regulated areas of the protected monument, by issuing a no objection certification (NOC) and restricting the height of buildings (residential/commercial) for construction under AMASR (A&V) Act, 2010. To control tourists, a visitor movement plan has been prepared. Hence, these problems are mitigated by creating awareness among the public by conducting awareness programmes. However, the conservation effort at Mamallapuram, particularly Shore Temple, portrays the theme of 'struggle against nature' (Narasimhaiah 1995).

Airavateswara Temple, Darasuram

Darasuram is a panchayat town located 3 kilometre away from Kumbakonam, in Thanjavur district of Tamil Nadu. This town is known for Rajarajeswaram or Airavateswara temple, which is one among the great living Chola temples along with Brihadeswara Temple, Thanjavur, and Gangaikondacholiswaram at Gangaikondacholapuram, UNESCO's World Heritage Monument, declared in 2004. Darasuram is close to ancient Palayarai region, which was a part of the urban centre of Palayarai-Kudamukku, a residential capital of imperial Cholas. All the early inscriptions of Aditya I and Parantaka I show that their activities were mainly centred in this area. The tradition of constructing gigantic temples in the middle Cholas period was continued by the later Cholas. Airavateswara temple (Rajarajesvaram at Rajarajapuram) was built by Rajaraja Chola II (1143–1173 CE), who patronised art and architecture like his predecessors. This temple's grandeur and sheer beauty of sculpting genius are great in its own way and unique. This temple complex faces east and the temple is enclosed within a massive compound wall along east–west and north–south directions, with the *dhvaja-stambha* and the Nandi *mandapa* both being outside this enclosure (Balasubrahmanyam 1975).

Architecture

The main temple consists of the *garbhagriha*, the *ardhamandapa*, the *mukha-mandapa* and the hall (*tiru-mandapa*) of *Rajagambhira* (i.e., Rajaraja II), which is the *agramandapa* (Figs. 4 and 5). The entire structure, built at the same time, rises from a high plinth (*upapitha*). The square *garbhagriha* has a thick wall on which the *vimana* tower

rises gracefully. There is no circumambulatory passage immediately round the *garbhagriha,* making it a *nirandara*-type *vimana*.

The *ardhamandapa* linking the *garbhagriha* to the *mukha mandapa* is in two parts. The first chamber, which is close to the sanctum, is an closed one with an entrance from the eastern side only; it is supported by four pillars and has almost all the features of an *antrala*. The other half of the *ardhamandapa* is a continuation of the *mukha mandapa* and has two side entrances, resting on four pillars.

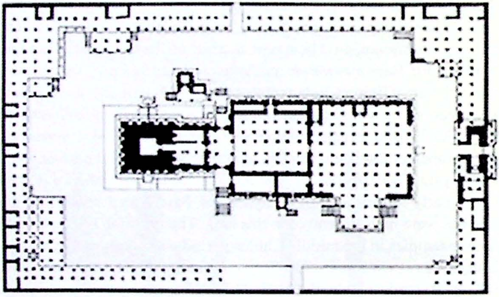


Fig. 4. Airavateswara Temple, Darasuram Ground Plan (Source : ASI)

The next constituent element in the temple is the *maha-mandapa*, supported by six-rows (north–south) of eight pillars each and is enclosed by walls on the south, east and north. The eastern wall, which is thicker than the other two, and the entrance in the middle connect this *mandapa* with the bigger one, viz., the *agramandapa* (also called the *manimandapa*).

The *agramandapa* is also called *Rajagambhiran-tiru-mandapam,* after the builder. This *mandapa* deserves special attention as it is conceived as a chariot, with artistically and realistically carved

out wheels with hubs and spokes and drawn by caparisoned and straining horses. Darasuram thus anticipates the giant-wheeled temple of Konarak in Odisha (1235–1253 CE) by more than hundred years. This *mandapa* is supported by ten pillars in nine rows in north–south orientation, the perimeter pillars being panelled up to make the hall a closed one excepting for the porch on the southern side and a gap in the eastern side to permit a direct view of the sanctum from the main *dvara*. The porch in the south is reached by a set of ornately carved flights of steps from the east and the west. Facing this *mandapa* on the eastern side is the *balipitha,* outside the main podium, and is approached by an ornately carved balustrade flight of steps, which produce musical notes of varying frequencies. These steps are therefore known as the 'singing steps'.

The main temple rests on a high platform (*upapitha*) and carries named panels depicting scenes from the lives of the Saiva saints (*Nayanmars*). The *sri-vimana*, the super-structure over the *garbhagriha* in five *talas,* towers at a height of 63.5 feet crowned by circular *griva* and *sikhara*. The pillars of the Rajarajagambhira hall rise from the heads of sitting lions and are crowned and decorated by broad *palagais* and *podigais*.

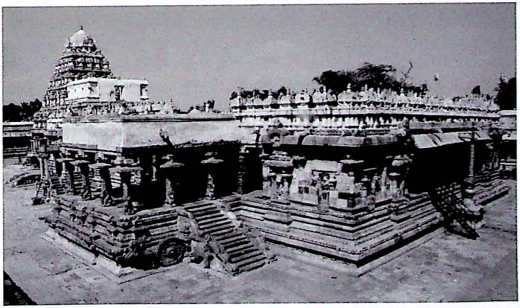


Fig. 5. A view of Darasuram Temple Complex (Source : ASI)

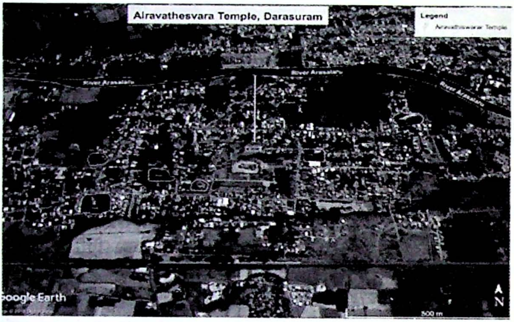


Fig. 6. Ponds around Airavathesvara Temple (Source : Google Map)

Causes of Decay

Geographically, the temple is located between the two rivers Arasalaru and Tirumalai Rayarpattinam river, which are the tributaries of river Kaveri and also the monument is surrounded by several ponds (Fig.6). Hence, water logging is the focal issue in this monument, as the monument is more than 1.5 metre lower than the present surface level. The temple is getting affected by capillary action, due to which water penetrates into the walls of the temple. Though the temple is built out of granite, it damages the stone structure, causing stone flaking, especially as observed in the *adhishtana* (foundation) portions sometimes. To investigate the problem, proper conservation measures are being taken from time to time.

Further, the natural fissures in the formation have given rise to two kinds of problems: percolation of rain water and breakage along the fissure. These two problems are pronounced in the cloister mandapas.

Problems of Conservation

The Airavateswara temple is listed as monuments of national importance in 1954 is under the protection of the ASI. This temple is live in the sense that traditional religious rituals continue being

performed there through an active participation of the general public. Thus the monument is also subject to the Tamil Nadu Hindu Religious and Charitable Endowments Act (1959) of the Tamil Nadu government.

Since from the time of protection, the ASI is conserving the Airavateswara temple from the atmospheric change and pollution as well as human vandalism and encroachment. From 1969 to 1979, the buried basement of the *Nandi-mandapa* and *balipitha* was exposed by excavation, which revealed the original details. The removal of the accretions led to the discovery of a unique structure with wheels and horses on the plinth of the *agra* (*mukha) mandapa.*

Fig.7 Stagnation of rain Water, Airavateswara Temple, Darasuram (Source : ASI)

The management of cultural heritage is often related to surface and groundwater management. De-watering is one of the greatest concerns for those managing waterlogged archaeological monuments and sites, as well as a great danger for foundations of above-ground monuments. The temple is 1.5 metre below the present surface level, and rain water stagnates inside the temple complex (Fig. 7). A canal was laid from the temple to nearby pond to drain the water. However, the problem is not solved as the mean sea level (MSL) of the water level in the pond is higher than that of the temple. Hence, water enters the

temple through same canal from the pond. Temporarily, the stagnating rain water is drained out by pumping and also flagstone flooring has been provided around the temple to prevent accumulation of rainwater. The rapid growth of towns and cities, i.e. urbanisation, also threatens cultural heritage. The surrounding area of the Airavateswara temple has been occupied by the local people. New developments outside a specific protected area can lead to changes in groundwater level and cause serious damage to heritage buildings and archaeological deposits. Especially the water bodies around the Airavateswara temple are encroached by the people due to which the water stagnates inside the monument. Due to water stagnation, the stone flooring also gets damaged. Hence, proper conservation measures have been taken up periodically to conserve the floors.

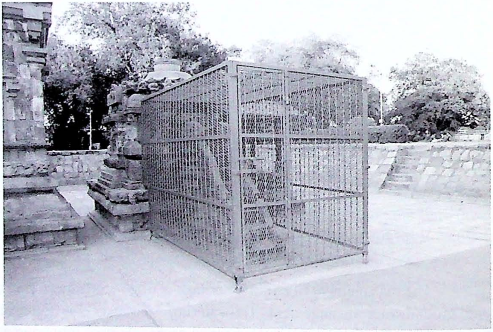


Fig. 8. Fenced stairs of bali-peeda, Darasuram (Source : ASI)

The percolation of rain water and breakage along the fissure terrace of cloister *mandapa*, *kalayana mandapa, ardha-mandapa* and *Nataraja mandapa* have been water tightened and conserved. Since the Airavateswara is a living monument, other conservation problems also arise, apart from the structural problems. Those problems are

chemically treated, that is, removing of moss and lichen accretions over the walls, pillars and ceilings and preserving stucco figures by filleting, edging and modelling.

Another important feature of this temple is musical steps near Nandi mandapa. Each step emits different musical tone on a musical scale. As mentioned earlier, the temple is a living monument and so an active participation of the general public is unavoidable throughout the year. Driven by curiosity, people started beating the steps by using stones, which led to its damage. Hence, the ASI, Chennai Circle, has provided iron grill gates to the steps and kept it locked to prevent vandalism (Fig. 8).

Conclusion

It is very clear that heritage management and conservation practice in India is complex and dynamic. A proper understanding of the natural and human-made subsurface environments that affect heritage is essential for *in situ* preservation, mitigation design as well as management of heritage monuments and sites. Globalisation as well as contemporary development threaten the authenticity, integrity, indigeneity and uniqueness of heritage places. The practice of heritage management and conservation in the last several decades has been oriented towards safeguarding and protection of heritage monuments, which are irreplaceable and that which are threatened by loss, damage and misuse. By enforcing the antiquarian laws viz., Ancient Monuments Preservation Act, 1904, Ancient Monuments Archaeological Sites and Remains (AMASR) Act, 1958 and AMASR (A&V) Act, 2010, the ASI is taking good efforts to protect and safeguard the above mentioned heritage sites. The world's cultural heritage is essentially a non-renewable resource that, when properly managed, benefits communities both socially and economically.

References

Balasubrahmanyam, S.R. 1975. *Middle Chola Temples*. Haryana : Thomson Press (India) Limited, Publication Division.

Indian Archaeology – A Review 1969-70, 1970-71, 1976-77, 1977-78. New Delhi : ASI.

Lal, B.B. 1953. *Chemical Preservation in Archaeological in India.* Delhi: Bureau of Education, Govt. of India, Publication No. 66.

Marshall, Sir John. 1923. *Conservation Manual.* New Delhi: ASI. (Reprint 1990).

Narasimhaiah, B. 1995. *Conservation ofMonuments ofMahabalipuram: A Historical Account, in Sri Nagabhinandanam (Dr. M.S. Nagaraja Rao Festschrift) Essays on Art, Culture, History, Archaeology, Epigraphy and Conservation of Cultural Property of India and neighbouring countries,* (L.K. Nagaraju and S. Srinivasan, eds.), pp.837-851. Bangalore : Dr. Nagaraja Rao Felicitation Committee).

Sastri, Harihara. G. (n.d). *Avanti-Sundari-Katha-Sara, The Journal of Oriental Research* Vol. XVI Pt. II.

Srinivasan, K.R. 1958. The Pallava Architecture of South India, in *MASI 14*. New Delhi: ASI.

Srinivasan, K.R. 1964. *Cave-temples of the Pallavas*. Architectural Survey of Temples No. 1. New Delhi: Archaeological Survey of India.

Srinivasan, K.R. 1983a. Andhras, Ikshavakus and Literary Sources, in *Encyclopedia of Indian Temple Architecture South India, Lower Dravidadesa* (M.W. Meister and M.A. Dhaky eds.) *(200 B.C-1324A.D)*, Vol. I. pp. 3-22. Delhi: AIIS & University of Pennsylvania Press.

Srinivasan, K.R. 1983b. Pallavas of Kanchi: Phase I, in *Encyclopedia of Indian Temple Architecture South India Lower Dravidadesa,* (M.W. Meister and M.A. Dhaky eds.) *(A.D.650-1324 A.D)*, Vol. I. pp. 23-80. Delhi: AIIS & University of Pennsylvania Press.

18. Heritage Management in India and the United States: Comparative Perspectives

S. Suresh

Abstract

There are striking similarities and subtle differences between heritage management norms and practices in India and the United States. In both these countries, there is a growing awareness of the need to promote heritage knowledge among the general public through popular publications, public lectures and workshops, exhibitions and museums as well as public tours of historical monuments, archaeological sites and tribal settlements. In the process, heritage management that includes within its ambit heritage tourism has emerged as a major area of concern not only for the historian-archaeologist but also the administrator, urban planner and the policy-maker. Both India and the United States have a strong and fairly well-established system of heritage management that has evolved in the last two centuries. But there are glaring differences in the priorities and focus areas between the two systems. The American system has a more holistic view of heritage and while conserving or administering any heritage site, all aspects including natural heritage and intangible heritage are given equal importance and specialists drawn from each of these fields are actively involved in the process. Simultaneously, heritage tourism, both as a means of public participation in heritage and as a valuable money-spinner, has been recognised and museums, universities and even archaeological organisations such as the Archaeological Institute of America (AIA) and America's National Trust for Historic Preservation (NTHP), the counterpart of India's Indian National Trust for Art and Cultural Heritage (INTACH), are actively engaged in promoting heritage tourism. In India, however, none of the heritage stakeholders (government's archaeology departments, museums, universities, INTACH) are involved in heritage tourism administration. The present paper compares the two systems with a series of examples drawn from field studies in both countries. The field studies in the United States were part of a Fulbright research project. Besides its academic interest, the paper also presents valuable ideas and suggestions for each system.

Keywords: Heritage Management; Cultural Resource Management; Heritage Preservation; United States; India.

Objectives, Scope and Source

This paper analyses the similarities and differences between the heritage management systems in India and the United States. Tracing the evolution of heritage management in these two countries, the paper seeks to locate, within each system, the aspects that hold valuable lessons for the other. The paper concludes with certain practical suggestions.

There are multiple reasons for choosing India and the United States for the present comparative study. In recent years, there has been a remarkable progress in the political, ambassadorial, trade and cultural interactions between the two countries. There is a constant exchange of expertise and ideas between the two countries in several disciplines including information technology. However, such interactions in heritage-related fields are comparatively few (Suresh 2017).

The paper is based on library, archival and field studies in India and the United States. The researches in the United States were part of a Fulbright program. The study also draws from discussions with heritage administrators, museum curators, archaeologists and artists in both these countries. Unless otherwise stated, all observations in this paper are based on the above field studies and discussions.

Government Agencies

Contrary to popular misconception, heritage preservation is not a modern concept. Throughout history, royal families, merchants and others have attempted to conserve historical relics (Suresh 2015a: 84–89). Such efforts, backed by modern technology, have increased since the 17th century.

Systematic art and archaeological studies began in India in the early 16th century, long before they commenced in the United States. This was primarily because of the interest evinced in Indian archaeology by the European powers that began to colonise many parts of India around that time (Chakrabarti 2001:4). Slowly, the archaeology of India increasingly began to be associated solely with grandiose monumental ruins of the past, mostly the remote past.

In 1858, the administration of the British territories in India passed on from the English East India Company to the British Crown. Realising the necessity for an exclusive government department for archaeological operations in India, the British established, in 1861, the Archaeological Survey of India (ASI), the Indian counterpart of the American National Park Service (NPS) founded in 1916. The ASI was closed down in 1866, but revived in 1870 and again shut down around 1885. Consequently, the work of archaeological conservation was entrusted to the provincial governments that utilised the services of their Public Works Departments for the same. Lord Curzon, the British viceroy in India (1899–1905), again revived and reorganised the ASI.

In those days, the ASI catered to the British dominions in India while the French and other European powers had their own archaeology and heritage preservation departments for their respective colonies within India. Simultaneously, several of the 566 native kingdoms, independent of the European powers, spread all over India, started their own archaeology departments and museums (Suresh 2008). After India became free from British rule in 1947, the archaeology administration established by the British was continued by the new government. Subsequently, when the French and the Portuguese colonies in India became free from foreign rule, the archaeology agencies in these places were merged with the administrative system prevalent in other parts of India. Similarly, the museums and archaeology offices of the various native kingdoms merged with India's heritage-related government agencies when these kingdoms joined the Union of India.

Presently, the ASI, with its headquarters in New Delhi, is the highest national-level authority for heritage management in India. Most of the states of India also have their own state-level archaeology departments sometimes merged with the departments of museums, archives, tourism or zoos. Thus, while the ASI administers and conserves monuments and sites of national importance (Fig. 1), the state-level agencies take care of structures and sites of regional and local importance (Fig. 2). Both the ASI and the state-level departments perform other archaeological operations including explorations and excavations.

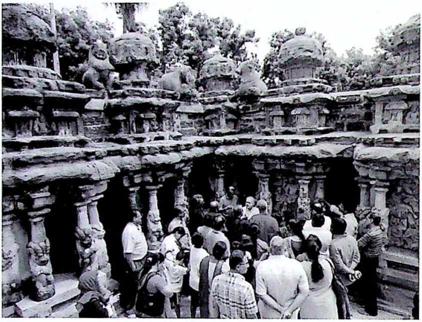


Fig. 1. Participants of an INTACH Heritage Tour in the Kailasanatha Temple (8th century), Kanchipuram, Tamil Nadu—a monument protected and administered by the Archaeological Survey of India (ASI) (Source : author)

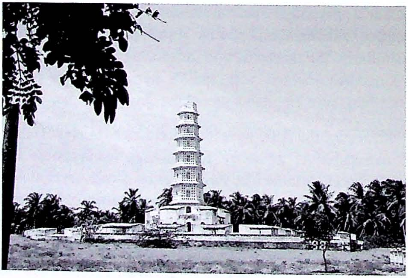


Fig.2. Manora Fort (early 19th century), Tamil Nadu—a monument protected and administered by the Tamil Nadu State Department of Archaeology, (Source : author)

Coming to heritage-related legislations in India, on Lord Curzon's initiative, the Ancient Monuments Preservation Act, one of the first and most famous archaeology laws in this part of the world, was passed in 1904. Interestingly, there are several striking similarities between this Act and the Antiquities Act, the first major heritage law in the United States, passed two years later in 1906. Thus, one is tempted to infer that the framers of both these legislations had either regularly communicated with each other or else, had, as their model, the legislation of some other country, probably Great Britain that had, by then, a major heritage law – the Ancient Monuments Protection Act of 1882. The India Act was part of the British efforts to help preserve India's cultural heritage and appears to have been definitely inspired by Britain's law of 1882 (Suresh 2015b). On the other hand, the U.S. Act is believed to be mainly in response to the indiscriminate excavation in the desert southwest of that country for enriching the museum collections in Europe (King 1987). According to both these Acts, any attempt to deface or destroy any old monument, mainly on public lands, was a punishable offence. For those who indulged in such offences, the India Act prescribed a fine of up to Indian Rupees 5000 and imprisonment up to 90 days while the U.S. Act prescribed a fine of US Dollars 500 and imprisonment up to 90 days. Both the Acts explicitly stated that the government can, if it deems necessary, acquire control of historical buildings or sites under private ownership. For the first time ever, both the Acts attempted to prevent unauthorised excavation of archaeological sites. The U.S. Act was, however, more specific and detailed with regard to the precise procedure and purpose of issuing 'permits' to competent archaeologists for excavating the sites and even for the removal of antiquities or artefacts from public lands.

After 1904, India did not make significant progress in the arena of heritage legislation for more than 50 years. This was partially because during the crucial years between the two World Wars, the colonial government had to encounter the nationwide struggle for freedom from British rule, ultimately resulting in the partition of the country into two – India and Pakistan – and the simultaneous political independence of the two countries in 1947. In 1958, India passed the Ancient Monuments and Archaeological Sites and Remains Act

'to provide for the preservation of ancient and historical monuments and archaeological sites and remains of national importance, for the regulation of archaeological excavations and for the protection of sculptures, carvings and other like objects'. This Act was mainly an improvement or rather an extension of the Act of 1904. Both these laws mainly aimed to protect specific monuments and sites but were silent on the loss of archaeological resources due to modern constructions and other development activities. The next important archaeology law in India is The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act of 2010. This Act is, again, mainly confined to the same specific monuments and sites but aims to regulate construction and other development activities up to a distance of 300 meters on all sides, around an archaeological property. This distance of 300 meters could be further extended in the case of monuments of special importance.

Besides the above-mentioned national laws, many states in India, like those in the United States, have state-level laws for the protection of archaeological properties. To cite an example, Tamil Nadu has the Tamil Nadu Ancient and Historical Monuments and Archaeological Sites and Remains Act 1966 (Act 25/1966). But unlike the system in the United States, the state-level laws in India are again invariably confined to specific monuments and sites and do not address the wider issues of preserving archaeological relics including underwater relics outside these properties as also protecting historic districts, streetscapes and landscapes. Some of the state governments, district authorities and city municipal corporations have officially announced that they are in the process of framing laws for protecting sites and structures not protected by the earlier mentioned national and state-level laws. But in most instances, these new laws are yet to come into force.

In contrast to the conditions in India, in the American scenario, the heritage preservation movement is less complex and better documented. It is almost as old as the country itself, having started, on a small-scale manner, in the closing years of the 18th century, with the primary objective of preserving the relics connected with the birth of the nation in 1776 and the long and violent struggle that preceded it.

The first tangible evidence of the preservation concept in that country can be taken to be a notation dated 3 August 1796 in the *Pocket Diary* of Benjamin H. Latrobe, expressing his anguish at the impending destruction of an old house named 'Green Spring' in James City County in Virginia (Hosmer 1965: 29). The local people's vehement disapproval of the demolition of the 'Old Brick' Meetinghouse at Boston around 1808 is, however, more widely known among scholars and is repeatedly cited to be the starting point of the nation's history of preservation. And as the preservationists steadily advanced towards the safeguarding of the manifold tangible symbols of America's past, archaeology slowly emerged as one of the numerous constituents of this massive movement.

Presently, the NPS of the U.S. Department of the Interior (DOI) is the highest national-level authority for heritage in the United States. It is headquartered in Washington D.C. In addition, there are several other national-level, state-level and local-level government agencies involved in heritage management throughout the country.

Unlike the circumstances in India, in the United States, the Antiquities Act of 1906 paved the way for several later legislations that encompassed different types of archaeological sites, monuments and antiquities. Many of the cultural heritage-related U.S. laws also contain provisions for the protection of natural heritage including forests and parks. While some of these Acts such as the Historic Sites Act of 1935 focused primarily on the preservation of 'historic sites, buildings and objects of national significance', others were specifically related to the practice of archaeology. The most significant among the latter laws were enacted after 1960. The earliest and least known among these Acts was the Reservoir Salvage Act of 1960, which basically aimed to provide for the protection of 'historical and archaeological data which might otherwise be irreparably lost or destroyed as the result of the construction of a dam'. The Act was amended in 1974 and was renamed the Archaeological and Historic Preservation Act to extend its provisions beyond dam building to all federal construction activities and all federally licensed or assisted activities that would cause loss of archaeological data. The Act stipulates the recovery and preservation, including analysis and publication, of such data before the

commencement of the construction activities. But such a preservation programme is not necessary if the construction is undertaken in response to emergency situations including natural disasters. In 1966, the U.S. Congress passed the well-known National Historic Preservation Act. The enactment of this important law appears to have been driven by several federal programmes such as urban renewal and the interstate highway system that were often making use of archaeological sites and historical relics. This law laid the basic foundation for the National Historic Preservation Program. The program encompassed a wide variety of historic and archaeological properties and conceived the idea of a comprehensive National Register of Historic Places and a regulatory process for the protection of such properties. The Archaeological Resources Protection Act of 1979 and its later amendments have explicitly established the precise procedures for permitting excavations on federally controlled lands and introduced stringent penalties for illegal digging and transport of archaeological materials from one state to another within the United States. A unique feature of this Act, unknown among archaeology legislations in India and many other countries, is the stipulation that the government establish programmes to increase public awareness of the significance of archaeological resources and the need to protect the same. The Act further states that the government shall take steps to foster communication, cooperation and exchange of information between government officials, art collectors, professional archaeologists and associations of professional archaeologists. The Abandoned Shipwreck Act of 1988 exclusively deals with underwater archaeology by outlining the regulations for the proper conservation of abandoned shipwrecks and their use for recreational purposes. The Native American Graves Protection and Repatriation Act of 1990 details the rights of Native Americans with regard to the excavation and preservation of 'human remains, funerary objects, sacred objects, and objects of cultural patrimony'.

Besides the earlier mentioned federal laws, nearly all the states in the United States now have laws for promoting the protection of archaeological resources at the state level (Carnett 1995). Many of these laws have been modelled on the federal laws. Most of the states have made provisions for the protection of historic and archaeological

properties that may be impacted as a result of state projects such as construction of roads and bridges. Yet there are significant variations in the scope, enforcement and penalty provisions of the laws in different states. Interestingly, some states have also introduced certain new laws unknown among federal laws or the laws in other countries including India. For example, in some states, there are specific rules with regard to digging on private lands but there are no such rules in other states. In some states like Delaware, archaeological investigation on private lands without state-provided archaeological assistance is discouraged. In Kentucky, a state rich in archaeological resources, the state enforcement authority, with regard to archaeological conservation, extends to private land if the state has entered into a contract with the landowner. In New Mexico, income tax credits are offered for landowners who preserve historic and prehistoric sites in their properties. Pennsylvania restricts the drilling of gas and oil wells in or near archaeological sites. Hawaii has stipulated some of the strictest penalties for individuals and associations involved in damaging archaeological resources. The penalties include exclusion from participation in any state-funded or country-funded projects for 10 years. In Hawaii and North Carolina, each day of violation of the law is considered a separate offence. North Carolina and a few other states have even stipulated special punishments for those who do not report to the state the news of the discovery of a burial site. With a view to strictly enforce the archaeology laws, Tennessee has accorded police powers to archaeology officers. Montana has prohibited the making of reproductions or forgeries of artefacts with the intention to sell these objects as genuine antiquities. Several states have passed laws to facilitate the systematic and scientific study of archaeological relics. In Montana, scientists can study Native American human remains for up to one year before transferring the same to the affiliated tribe. In Nevada, surface collection of Indian artefacts is permitted if that area does not fall under the statutory definition of a prehistoric site. The laws of Indiana provide encouragement to amateur archaeologists by recommending a specific code of ethics for them. South Carolina is probably the only state that has an elaborate system of issuing different types of permits or licenses – hobby, intensive survey, data recovery and salvage – to individuals or agencies wanting to conduct

archaeological investigations.In addition to the federal and state laws, local laws and ordinances also aid in the preservation of archaeological resources in several places throughout the United States (Lerner 1995: 11). In many instances, certain regulations for archaeological site protection are integrated into the land use control stipulations. In many places, archaeological and historical factors are considered in the land-use planning and zoning application permit processes. In 1989, the city officials of Alexandria (Virginia), in consultation with the local developers and citizens, passed an ordinance amending the city code to provide for the consideration and protection of archaeological sites.

Citizens' Groups: the National Trusts

For centuries, heritage administration and preservation was considered to be the exclusive responsibility of the ruler or the government. In the United States and a few other countries, from around the early 19th century, small voluntary organisations or citizens' groups also began to work for heritage-related causes. Gradually, the concept of a national-level voluntary organisation, to support and supplement the role of the government, became popular. The first such National Trust was established around the year 1895 in England.

Both India and the United States have a strong National Trust that plays a pivotal role in heritage preservation. But there are significant differences in the manner of establishment, administration, work environment and the sources of funding between these two Trusts. An analysis of these differences will help understand the varying roles of these two Trusts in their respective countries.

The founding of the National Trust of the United States – the National Trust for Historic Preservation (NTHP) – in 1949 is the culmination of over a century of voluntary efforts towards heritage conservation in that country. Long before the NTHP, several voluntary organisations sprang up in different parts of the country. One such organisation was the Society for the Preservation of New England Antiquities (SPNEA) founded by William Summer Appleton in 1910. Some scholars regard the American Scenic and Historic Preservation Society, founded in New York towards the closing years of the 19th century, as the forerunner of the NTHP (Lea 2003). Interestingly, the

NTHP, although a voluntary membership organisation, was not founded by an individual or a group but was chartered by the U.S. Congress, with President Harry Truman signing the legislation creating the Trust. Thus, the Trust was established with the fullest cooperation and blessings of the U.S. government. The headquarters of the NTHP is in Washington D.C. while there are regional offices in many parts of the United States. All the offices are manned by professionals including lawyers, conservation experts, educators and administrators. Volunteers come forward to render help for specific projects or occasions, supplementing the work of the full-time professionals hired by the Trust. In the last seven decades, the NTHP has emerged as a private-sector leader of the U.S. preservation movement, offering a wide and ever-increasing range of technical and legal guidance, educational programs and other services to help preserve the country's natural and human-made heritage. The NTHP also owns and administers heritage properties including historic homes and museums spread throughout the United States. The first historic site acquired by the Trust, in 1951, is the Woodlawn Plantation, located close to the famous Mt. Vernon Estate, in Virginia (Figs. 3 and 4). The NTHP has also undertaken archaeological digs at some of its historic sites including Montpelier, the property of James Madison, the fourth president of the United States, in Virginia (Fig. 5).

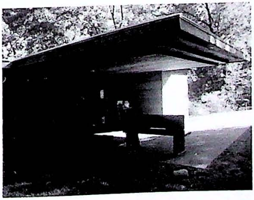


Fig.3. Pope-Leighey House (built 1941), designed by architect Frank Lloyd Wright, transplanted from its original location to the grounds of the Woodlawn Plantation, Virginia and now a Historic Home Museum-- administered by the National Trust for Historic Preservation (NTHP) (Source : author)

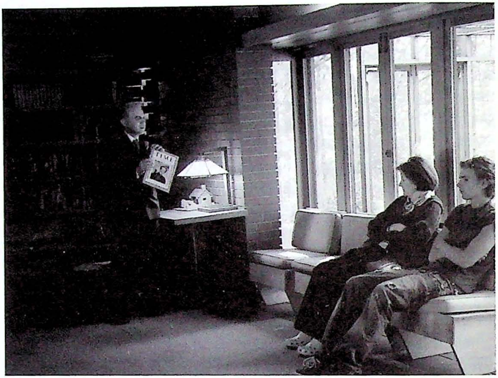


Fig. 4. One of the rooms within Pope-Leighey House (Source : author)

Fig. 5. Archaeological Excavations in the grounds of Montpelier (18th century), Virginia - property administered by the National Trust for Historic Preservation (NTHP) (Source : author)

The founding of India's National Trust is a striking contrast to that of the NTHP. Throughout the period of India's struggle for freedom from British rule and for many years even after India became an independent nation in 1947, the very concept of a National Trust for the country was never thought of by the government or the people. Again, unlike the NTHP, India's National Trust hardly had any forerunner or model within India. Interestingly, if India's first major conservation law, passed in 1904, was conceived on the British model, India's National Trust was also first conceptualised in Britain. The seed money for setting up the Trust came from the bequest of Charles Wallace, an enterprising English businessman who, before his death in 1916, willed a substantial part of his wealth for India. In 1982, this money was received by Indira Gandhi, the then prime minister of India, on behalf of the people of India. The Trust was finally established in January 1984 and was named the Indian National Trust for Art and Cultural Heritage (INTACH). It was registered as a voluntary organisation under the Societies Registration Act. Unlike most other National Trusts including the NTHP, INTACH was conceived as a mammoth people's organisation to be administered mostly by part-time and/or honorary workers. Thus, INTACH has a cadre of paid full-time staff only at its central office in New Delhi and in the research and conservation laboratories that were later set up in different parts of India. The various regional offices or chapters of INTACH are administered by conveners who are invariably honorary workers. Such chapters exist in every part of India as well as in a few foreign locations such as London. INTACH is, thus, perhaps the only National Trust to have offices even outside the country of its origin. Its manifold activities include educational programmes mainly aimed at school children, research-level and popular publications, environmental conservation, and documentation and restoration of old buildings and artefacts. But unlike many other National Trusts including the NTHP, INTACH does not own or administer any heritage property, historical monument, archaeological site or museum. Again, INTACH has not attempted archaeological digs in any part of India.

Coming to the role of the NTHP and INTACH in government activities, it is clear that the former Trust, partly due to its being chartered by the country's legislature, always enjoyed greater 'credibility' and

'legitimacy' in the eyes of the public, thus enabling it to play a proactive role in conservation issues, even during its formative years. INTACH, on the other hand, did not have this 'privileged upbringing' and hence had to literally 'fight' out for its rightful place in the country's conservation programme. The belated recognition accorded to INTACH was also partially because most of the government agencies in India were, and to a large extent, even now are ignorant of the significant role played by such Trusts in other countries.

In any country, the National Trust's opposition to and influence on government policies is curtailed when the Trust is wholly or even partly financed by the state. Even the NTHP found itself in such a 'delicate' situation more than once. Even if a National Trust is, at any point of time, financially self-supporting, it needs the state support on several non-financial issues. For example, government approval is needed for a National Trust to undertake conservation works in a government building. Another crucial issue determining the National Trust–government relationship pertains to the litigations involving the Trust and the state agencies. In 1970, the NTHP attempted, for the first time, to save historic sites through litigations. Since then, it has been involved in over 130 court cases including the most well-known *Penn. Central Transportation Co. v. City of New York* of 1978. This particular case is widely considered as a landmark judgment in favour of heritage. In India too, INTACH has frequently been involved in litigation to save historic buildings owned by the government and corporate agencies. To cite an example, INTACH could, through court intervention, prevent the demolition of the iconic DGP (Director General of Police) office building in Chennai in the 1990s.

As regards the position of National Trusts in the framing of heritage legislations, the NTHP has played a decisive role in this regard. In 1966, the NTHP, along with representatives of the NPS and private citizens, helped frame the famous National Historic Preservation Act that created the Advisory Council on Historic Preservation (Howard 2003). The NTHP continues to participate in the heritage decision-making processes in different states in the United States.

If INTACH's role in government processes is minimal, its role in framing heritage legislations is more limited. A chief reason for this is, as indicated earlier, heritage legislations, whether at the national or regional levels, are too few in India. India's latest national-level conservation legislation – The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act of 2010 – however specifically stipulates that the bye-laws for the regulation of development activities in the vicinity of the historic monuments and sites should be formulated in consultation with INTACH. This is the first instance in which the Government of India has accorded official or legal recognition to INTACH and its role in historic preservation.

INTACH representatives are now increasingly invited to serve on conservation decision-making committees at the national and regional levels. Despite having its own conservation departments, the government has repeatedly invited INTACH to undertake the restoration of some of the most complex and prestigious government buildings. The government has also been liberal in providing funds for INTACH's activities. Government officials participate in INTACH's training programmes and workshops.

Besides the National Trusts, both India and the United States have other voluntary membership organisations promoting heritage. The activities of these organisations are often limited to a specific city or region. In the United States, one of the biggest among such organisations is the Archaeological Institute of America (AIA), which has branch offices all over the United States and Canada. Scholars and others interested in heritage administer these offices, called AIA Societies, on a voluntary basis. The AIA headquarters in Boston, however, has an office with full-time salaried staff. Thus, AIA and INTACH share several common administrative features.

Concluding Remarks and Suggestions

The foregoing survey clearly reveals that both India and the United States have a strong system of heritage administration and preservation, but their focus and emphasis are vastly different. Thus, each system can benefit from the other through collaborative research

projects as well as more frequent exchange of ideas and technical know-how between the two countries. Such exchanges can be initiated at the level of the government, universities and the National Trusts of both these countries. Being a developing country with multiple national problems such as overpopulation and unemployment, India is certainly lagging behind the United States and several other developed countries in certain aspects of heritage management. Until recently, India's heritage management system was heavily archaeology-centric focusing on relics of the ancient or at the most, the medieval periods (pre-1700 CE), with all the laws and efforts directed towards documenting and preserving the most important among these relics. It is only now that there are attempts to preserve other aspects of heritage including colonial-period relics, intangible cultural heritage and natural heritage. In the process, government agencies and voluntary organisations not involved in archaeology operations are now engaged in heritage preservation. But as India is a vast and ancient country, rich in natural and cultural resources, there is ample scope for better and more work in the field. Presently, the country does not have adequate skilled manpower for heritage-related work. Heritage-specific careers and university courses including those related to archaeology do not attract many youngsters. This situation could be partially remedied through effective awareness and career counselling programmes where the benefits and rewards, tangible and intangible, of heritage-related careers could be highlighted and publicised. Simultaneously, it is time that, as in the United States, in India too, apart from the archaeology department, other government agencies are also involved in archaeological investigation and preservation, at least to the extent the activities of these agencies impact archaeology. This will, eventually, enhance the role and visibility of archaeology both within and outside the government and incidentally, augment career opportunities for archaeologists.

The importance of heritage tourism, both as a means of public participation in heritage and as a money-spinner, has been recognised in India and the United States. In the United States, universities, museums (mainly the Smithsonian), the AIA and the NTHP regularly conduct expert-led tours to heritage destinations (including sites in India) for the public. Some of the museums and universities in India could

consider conducting such tours. In the last few years, INTACH has been conducting a few such tours in South India (Fig. 1).

India does not recognise the role of amateur archaeologists who, although professionally not qualified, can, with some guidance and training, help in myriad ways such as fund-raising, documentation, crowd-control and guiding tourists in monuments and museums. In India, amateur archaeologists have no legal standing whereas some states in the United States have provisions for the issue of even excavation permits for them. India has many amateur archaeologists with a genuine love for the subject. The Indian government should evolve ways and means to utilise the resources of this group to further the cause of heritage. Eventually, a few of these amateur archaeologists may graduate to be professional archaeologists or heritage administrators that India needs in large numbers!

References

Carnett, Carol L. 1995. *Preservation Law Reporter – Special Report, Archaeological Assistance Study—3: A Survey of State Statutes Protecting Archaeological Resources*, Washington D.C.: National Trust for Historic Preservation and U.S. Department of the Interior – National Park Service – Cultural Resources – Archaeological Assistance Division.

Chakrabarti, Dilip K. 2001. *India-An Archaeological History – Palaeolithic Beginnings to Early Historic Foundations.* New Delhi: Oxford University Press.

Hosmer, Jr., Charles B. 1965. *Presence of the Past – A History of the Preservation Movement in the United States Before Willamsburg,* New York: G.P. Putnam's Sons.

Howard, Myrick. 2003. Nonprofits in the American Preservation Movement, in *A Richer Heritage—Historic Preservation in the Twenty-First Century* (Robert E. Stipe Ed.), pp. 313–351. Chapel Hill, NC: The University of North Carolina Press.

King, Thomas F. 1987. Prehistory and Beyond: The Place of Archaeology, in *The American Mosaic – Preserving a Nation's Heritage,* (Robert E. Stipe and Antoinette J. Lee Eds.), pp. 235–264. Washington D.C.: United States Committee – International Council on Monuments and Sites.

Lea, Diane. 2003. American Preservation Ethos: A Tribute to Enduring Ideals, in *A Richer Heritage – Historic Preservation in the Twenty-First Century* (Robert E. Stipe Ed.), pp. 1–22. Chapel Hill, NC: The University of North Carolina Press.

Lerner, Shereen. 1995. *Archeology and Historic Preservation,* Washington, D.C.: National Trust for Historic Preservation.

Suresh, S. 2008. Archaeology in *Madras Chennai – A 400-Year Record of the First City of Modern India, Volume I – The Land, The People and Their Governance* (S. Muthiah Ed.), pp. 185–198. Chennai: Palaniappa Brothers.

Suresh, S. 2015a. *The Tanjavur Marathas – Art, Architecture and Culture,* New Delhi: INTACH and Aryan Books International.

Suresh, S. 2015b. Archaeological Legislation in India: The Historical Context and Future Directions, *INTACH Journal* of *Heritage Studies* I: 1–9.

Suresh, S. 2017. Archaeology and Heritage Conservation Norms and Practices in India and the U.S.A.: A Comparative Analysis, in *Amaravati – Felicitation Volume for Professor P. Shanmugam (Essays on History, Archaeology, Epigraphy and Numismatics)* (S. Rajavelu, N. Athiyaman and V. Selvakumar Eds.), pp. 197–213. Chennai: Professor P. Shanmugam Felicitation Committee.

19. Preservation and Continuation of Traditional Festivals and Tourism in Rural Areas of Japan

Hitoshi Takanezawa

Abstract

In Japan, rapid economic growth from the 1950s resulted in mass migration of people from rural areas to urban areas. Consequently, many rural areas suffered a significant depopulation. It caused many problems with respect to socio-economic activity and also in the traditional cultural activity, including traditional festivals. From 1980s, a majority of the local community attempted regional revitalisation by utilising its traditional culture as a tourism resource. The government also enacted several laws to support this endeavour of the local community. Consequently, the nature of traditional festivals changed gradually, from a festival by the local community for themselves to a festival to showcase to tourists. Many local festivals grew in size and assumed a commercial flavour. In addition, from 1990s, tourists' demands became diversified and more experience-based, with their participation and communication with the local community and their culture. This new movement of tourism caused another change to the festivals with the participation of tourists. Although these changes brought economic effects on the local community, they also ushered in some problems like deterioration of cultural authenticity. On the other hand, many small festivals in rural areas were not developed to be tourism-oriented; now they are in danger because of the lack of participation of young people. At the end of 20th century, several universities started to collaborate with local community to support their effort in keeping its local traditional festivals alive and the university students participated as supporters. This paper reports the changes to local festivals from two angles—tourism and academic support—and presents their significance and problems in maintaining festivals in depopulated areas.

Keywords: Traditional Festivals, Depopulation, Rural Area, Tourism, Kankei Jinko, Koryu Jinko.

Introduction

Japan's rapid economic growth starting in the 1950s caused a big population outflow from rural areas to big cities. The word '*kaso*' (depopulation) was coined in the mid-1960s to describe the situation caused by a serious and rapid decline in population in rural areas. The report of the Committee on Regional Affairs of the Economic Council in 1967 defined the word as 'a state in which local residents cannot maintain their standard of living because of a severe depopulation'. For standard-of-living criteria, the report referred to services like education and disaster prevention, and the productive capacity of the area based on the rational use of resources (Office for Measures for Depopulated Areas Implementation of Regional Development Bureau of National Land Agency 1993: 1). However, these are not the only problems caused by depopulation; difficulty in preserving and maintaining traditional rural culture emerged as another significant issue (Samuta 2014: 7).

For rural residents, holding traditional cultural events, such as annual festivals or seasonal events, remains an important practice to maintain and reinforce their community. But depopulation makes it difficult to hold those festivals or events, and further it reduces the community's sense of unity and its vitality. As a result, holding these local events became increasingly tougher than ever before. To escape this vicious circle, various actions have recently been taken based on exchange and communication between urban and rural areas. This paper reports on the efforts and changes in tourism activities and the support extended by university students and discusses their importance.

1. Depopulation of Rural Areas and Crisis of Local Festivals

The rapid economic growth of the 1950s was not the only cause of the depopulation of rural areas in Japan. In the 1970s, many factories were established in rural areas, and numerous jobs were created. Many farmers changed their working arrangements: a job in the factory became their primary one, and farming became secondary. This working model – that of a part-time farmer whose main source of income comes from other jobs related to urban economy – became obsolete in the late 1980s due to economic globalisation and the collapse of the bubble economy. The present depopulation of the rural areas was brought about by these complex problems (Samuta 2014: 8).

In addition, starting in the 1990s, decrease of population happened not only because of out-migration, but also because of natural causes. The whole population then declined more rapidly. The word *genkai-shuraku*, which means 'marginal settlement', was coined to refer to a village where at least 50% of the population had reached the age of 65 because of depopulation. Coupled with *genkai-shuraku*, falling birth rates made it hard to maintain social events such as ceremonial occasions. The 2014 report of the Ministry of Internal Affairs and Communications says that the depopulated areas account for only 8.9% of the whole population of Japan, but those municipalities make up 46.4% of the total number of municipalities and 58.7% of Japan's entire land area (Ministry of International Affairs and Communications 2015: 1). In *genkai-shuraku* villages, the young generation is forced to move to the city for a job. They may return with their family several times a year to their native village; however, their children born in the city have a hard time perceiving their roots, and the rural world appears unfamiliar to them. Under these circumstances, not only did agriculture and farm lands pass down from generation to generation, but also the traditional cultural events, like annual or seasonal rituals or festivals with a long history, are in the danger of disappearing.

Many of the annual or seasonal festivals in the rural areas in Japan are held to wish for, or express gratitude for, a good harvest. Therefore, they are closely scheduled with the agricultural calendar. There are also many rituals based on Buddhism and Shintoism. Most of them are held by shrine parishioners or members of the local community. However, starting in the mid-20th century, many of these festivals and rituals were simplified or changed so that they did not require many people; in some cases, they were simply abandoned. There are several reasons for doing so: for example, with modernisation, people in rural areas lost interest in praying or showing gratitude to supernatural beings for a good harvest. Or people became part-time farmers and earned their main income from a job in a city or factory; so they were obliged to make work their first priority on the day of the festival, as the festival is held on a date following the agricultural calendar and not the business calendar. However, the main factor was a decline in population in the area, especially a decrease in the number of young people, who would

normally play a main role in the village festival. For example, during World War II, most young people went to the battlefields, and therefore annual festivals had to be cancelled in many places. At Kawasaka settlement in Sasayama city of Hyogo prefecture, local people used to celebrate the *yoi-miya*, the eve of the festival, with the *yama*, a festival float, pulled from the Kasuga Shrine 3.5 kilometre from the area. However, the transport of the *yama* was interrupted during World War II. It did not resume for more than 80 years, until 2018, because there were not enough people. Moreover, at Fukusumi area in Sasayama, at the *yoi-miya* of the Minazuki Festival (Festival of July), six settlements had their own *yama*, and people pulled it and gathered in the Sumiyoshi Shrine. But in the 1970s, Utogi village stopped participating in the festival, because of the depopulation of the village and the deterioration of their *yama*. Because of the ongoing depopulation, declining birth rate, aging of the population and stagnation of the rural economy, more and more areas are having trouble holding their annual or seasonal festivals and rituals.

2. Revitalisation of Rural Areas by Utilising Traditional Festivals

A series of Acts on Measures for Underpopulated Areas from the 1970s aimed to improve local infrastructure like water supplies and road environment and public facilities to reduce the inconvenience of the rural areas. These measures achieved certain results. However, on the other hand, in the context of social theories to solve the problem of depopulation in the rural areas such as endogenous development theory and regionalism in the 1970s, regional development or revitalisation of the local community attracted attention. For example, in Oita prefecture, a movement called *isson-ippin undo* (one village one product movement) was promoted and it achieved significant success by enhancing the characteristics of the area. Town planning promoted at Yufuin City in Oita also attracted attention as a plan that did not rely on developing and urbanising the land. People chose to promote their town and its nature and hot springs by adopting the method of town planning of the hot spring treatment areas in Germany. Then, in 1985, the Takeshita cabinet started the 'Furusato Sosei Project' (Homeland Creation Project). It aimed to promote regional development based on the initiative and creativity of the region itself by using the geographical

and historical conditions or resources inherent in each region. In this context, the 'Mura-okoshi Project' (Project for Revitalising a Small Local Area) was set up in 1984. This project supported not only the creation of local specialty products, but also the utilisation of intangible heritage elements such as an annual or seasonal festival and ritual. The idea was to encourage the participation of people in the festival and secure funds to hold it by creating a new dance or a parade, or adding a modern form of entertainment, such as a karaoke party, and not by preserving the festival in its traditional form. The policy of this project, which accelerates the transformation of traditional festivals, was reinforced by the "Omatsuri Act" (Act on Promotion of Tourism and Commerce and Industry in a Specified Area by Performing Events Using Traditional Performing Arts) in 1992.

Some people objected that putting a fundamentally different event in a festival entailed a serious deterioration of cultural authenticity. Uda and Abe pointed out that the festival was changing from a festival celebrated by local people who understood its inherent meanings to a festival conducted merely to entertain tourists (Uda and Abe 2015: 34). These problems should be discussed from the viewpoint of commodifying the traditional culture aimed at revitalisation of rural areas. However, changing a traditional festival into tourist-oriented one is not a typical phenomenon today. In fact, many of them arose in the area by presenting their splendid ornaments or valiant acts to spectators, even if the spectators were members of the community and not tourists.

The *Awa-odori* (Awa dance) is an example of a festival that changed to a celebration to entertain tourists in the early stages. As a result, it has become not only a traditional festival, but also a big tourism event. The *Awa-odori* is one of the *Bon* dances, performed on August 12–15 every year in Tokushima city of Tokushima prefecture. Originally *Bon* was a religious event of Buddhism with its roots in the medieval era. It was held to welcome the souls of the dead and give them a place to repose. The *Bon* dance started to be performed by local people on the night of *Bon*, but the intense dancing enlivened people and thus became a kind of entertainment. Gradually, many different dances were form in each region. The *Bon* dance in the Awa region, however, started tc

performed if not in the *Bon* festival then in events like the celebration of the prince's visit to Tokushima in the Meiji period, and it gradually changed into a tourism event. Its promotion to tourists began as early as the 1920s, and special benches for tourist spectators were built in the 1930s (Kobayashi 2005: 93-94). Therefore, it came to be known as the *Awa-odori*, a dance native to the Tokushima region (originally called the Awa region) (Tokushima Castel Museum 1997: 34–35). Now it is a major tourism event with the participation of around 100,000 dancers and attracting 1,300,000 visitors over four days. The Nebuta Festival in the Aomori region also became much more tourist-oriented in the early stages. It is said to have originated from a Tanabata (July) festival in China and is a traditional custom of the Tsugal region. It is famous for *dashi toro* (big lighting floats) that are made and carried by town districts or craft unions or companies. These were originally small but, starting in the Edo period, they gradually became bigger and bigger in the interest of bringing economic prosperity. Now more than 3,000,000 tourists visit the Nebuta Festival in a week. Making a big *dashi* float costs a great deal of money. However, many companies participate in the festival, because it is a major opportunity to promote themselves, and it strengthens the relationship between the local community and the company and the sense of belonging for employees of the company (Mitsui 2006: 7–14). These festivals developed as a big tourism event; they have significant economic effects and help strengthen the local community. The aim of the Omatsuri Act is to apply those success stories to the rural areas on a smaller scale.

The transformation of traditional festivals into tourist events is accelerated by recent changes in the style of tourism. In the 1980s, reactions rose rapidly against mass tourism based on development and heavy consumption, and people's sense of value became more diversified. Thus demands for tourism shifted to an exchange- and experience-based tourism in the 1990s. Earlier, tourists were just audiences, but now they have become participants, taking roles as a dancer or carrier of the *mikoshi* (portable shrine or divine palanquin). This means a transition from a festival as a showcase for tourists to a festival with their participation. Actually, in a dance performed in a festival like the *Bon* dance, visitors were allowed to join in from

early on. In the Awa dance, a tourist who wants to participate can join *Niwaka-ren*, a special group for tourists. In Gujohachiman city in Gifu prefecture, the *Gujo odori*, which is known as one of the three most famous *Bon* dances, is also famous for its open participation. The festival is held for around 30 nights from mid-July to early September. More than 300,000 tourists attend this spectacle, and most of them participate in the dance. In these festivals a pre-training programme is set up, and many people come to learn the "genuine" way of dancing. In the Nebuta Festival mentioned earlier, there is also a typical dance called *Haneto*; those who are wearing a designated costume are free to participate. Not only Japanese but also many foreign tourists participate in these dances.

On the other hand, it took some time before local communities accepted tourists or outsiders participating as carriers of the *mikoshi* or *dashi* (a festival float). The *mikoshi* is a holy vehicle where the gods dwell temporarily during the festival, and the *dashi* is a symbol of the community's pride. Thus, by tradition, outsiders were not permitted to touch them. Therefore, when the region was too much depopulated and locals found it difficult to carry the *mikoshi*, in many regions people placed it on the back of a pickup truck to drive it in the procession. However, as described later, as more and more volunteers or students participated in the activities to revitalise rural areas, people from outside were gradually permitted to help carry the *mikoshi* or *dashi*. In recent times, it is also offered as an experience-based tourism attraction, and the local community began to call for participation. Some regions even try to promote it as a typical Japanese cultural feature among foreign tourists. It is much harder for tourists to take part in the procession than in a dance, because the *mikoshi* and *dashi* are extremely heavy – sometimes more than a few tons – and carrying them is dangerous.

Holding a festival with tourist participation seems to have a greater influence on the area than a festival to merely showcase to tourists, especially in small rural areas. The transition to a festival as a showcase to tourists occurred when the locals decided to please tourists as an audience, and its principal aim was economic benefit. Tourists see themselves as outsiders to a festival, and the problems of maintaining

the festival are not their business. But the transition to a 'festival with tourist participation' can fundamentally change the relationship between tourists and the festival. Of course, this format is also intended to attract tourists, but in practice a tourist becomes a player by participating in a festival and may come to find himself or herself as a member of the group holding a festival, not merely as an 'audience'. The tourists are overcome by a sense of fellowship, and they also find a connection with the locals. As a result, community spirit is formed, and tourists experience a certain sense of belonging to the area.

For the locals, participating in and conducting the festival is evidence of their membership in the community; therefore, acceptance of a tourist, who is essentially an outsider, means a change in the definition of their community. In fact, a sense of crisis in holding their traditional festivals causes the transition to a tourism-oriented festival, but this transition is also an opportunity to open a traditional closed society in a rural area.

3. Support from University Students

There are areas where a festival has become participation-oriented and tourism-oriented. On the other hand, many areas continue to hold their festivals by themselves, as they used to do. Most of these latter festivals are small and cannot be made tourism-oriented, or the festival is attractive for an outsider, but locals don't know its value. Even when the festival is large enough to be a tourist attraction, locals may consider it important to hold a festival by themselves and not open it to tourists. In these areas, instead of tourists' participation, university students go to support the local community in holding the festival.

Starting at the end of the 20th century, as the crisis in rural areas intensified, many universities started to support activities to revitalise the festivals. Classes for activities to be conducted in rural areas were added to the curriculum. Volunteer programmes were also set up in various fields such as agriculture, forestry and fishery, shopping mall revitalisation, tourism promotion and support of traditional cultures. For example, even the Gion Festival of Yasaka Shrine in Kyoto, one of the most famous festivals in Japan, has become harder to hold each year, as an exodus to cities depleted the local population that supported

the festival. In the area carrying Ayagasa Hoko, which is one of the *hoko* (halberd) floats, there are only six houses of townspeople without young people. Starting in the mid-1990s, Prof. Yaghi of Bukkyo University became a member of the board of directors of the Ayagasa Hoko Preservation Society and began to bring his students to assist in the preparation of the festival. Students help make *chimaki* (a traditional amulet of the Gion Festival) and some ornaments for the festival, and during the Gion Festival, they sell *chimaki* and pull the *hoko*. Every year not only the students, but also many graduates who live elsewhere in Japan come together to support the festival. They seem to recognise themselves as members of the team supporting the festival. The local residents thank them for helping the festival and also for coming back every year.

Ikeda reported on an internship project to support the local festivals through the cooperation of local universities at Noto Peninsula in Ishikawa prefecture (Ikeda 2018: 81). Starting in 2011, a volunteer-dispatching project to support traditional festivals in Wajima City and Anamizu Town was started by Kanazawa University Center for Regional Collaboration, following similar programmes previously carried out by other local universities. These activities by local universities were united in the internship project 'Noto Matsuri no Wa' (Circle of Festivals in Noto), in cooperation with universities. In the program, students register at their own university to go to various towns and villages. They participate in a pre-training workshop, take part in the festival and join a party with the local people afterwards. In areas where the young generation is especially sparse, the students are welcomed for the youthful strength they possess in order to carry a *mikoshi* or pull a *dashi* float. The opinions of local residents include the following:

- The village was revitalised by the participation of students, and the former residents who had left for the cities felt a greater sense of longing for their hometowns.
- We hope the students understand the traditional culture is maintained and passed from generation to generation in Noto.

- We are glad if the experience of participating in the festival is useful for the students to understand the local culture and significant to succeed in their future.

The students also have positive impressions:

- The supporting activity of students revitalised not only the festivals, but also the culture of the areas, and it helps maintain and pass on the traditional festival to future generations.
- The participation of students promotes positive communication between students and the local residents, and even among local residents.
- Many valuable experiences are gained through contact and communication with the locals and administrative agencies of the areas, and those experiences enhance their basic social abilities.

The participation of students helps not only in revitalising the festival, but also in fostering communication between the locals and students, as well as among the locals. As the area continues to have a depleting population, the relationships in the local society weaken, and a lack of communication deprives the community of its vitality. But as students participate in the festival, the locals gather to discuss how to incorporate the students into the festival and begin to talk to each other much more.

Since 2015, the author has also carried out a support programme with students of Kobe Yamate University in the Fukusumi area of Sasayama city in Hyogo prefecture. Fukusumi was a rich rural area and flourished as a post station of the Sasayama–Kaido Road, leading to Kyoto in the Edo period. Many old houses remain there, and the area was designated the Nation's Preservation District for Groups of Historic Buildings in 2012. Local people traditionally celebrate two annual festivals praying for a good harvest. One is the Minazuki Festival (Festival of July), held for two days in late July. The other is the Hassaku Festival (Festival of August 1), held for two days at the end of August and September 1 (*Hassaku* means the date of August 1, but the date September 1 in the present calendar is almost the same as August 1 in the old Japanese lunisolar calendar). At the Minazuki

Festival, people of five settlements (originally six, as mentioned above) of the eastern part of Fukusumi each pull their own *yama* (float) to the Sumiyoshi Shrine and show their strength by lifting up the front of the *yama* and turning it. At the Hassaku Festival, five settlements on the western part of Fukusumi and two settlements of the Murakumo area each pull their own *yama* with special ornaments made by the locals every year.

As in other rural areas, in Fukusumi, the population is decreasing and aging; more than 40% of the population is older than 65 years of age. Because there are so few children and young people that holding the festival has become more difficult each year. In the 2015 area revitalising project, the author and students carried out some cooperative activities in animal-damage counter-measures and measures for empty houses, as well as promoting communication. Support for those two traditional festivals is one of those activities; it started in 2016. Students go into several settlements and help pull the float and build connections with the local people (Fig.1).

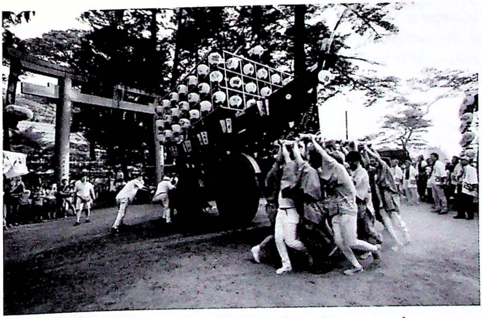


Fig.1. Lifting up and turning the float, Source : author.

In the case of the aforementioned "Noto Matsuri no Wa" the local people would like students to learn the tradition and history of the festival and its revitalisation. Some chairmen of the neighbourhood associations of the area said the following:

- The participation of students invigorated the local people and the whole atmosphere of the festivals.
- The locals were glad to see many young students pulling the *yama.*
- Explaining their traditional culture to the university students was a good opportunity for the locals to recognise its significance again.
- The people of the settlement wanted the students to keep coming to the festivals.

In addition, the young generation of locals started to communicate with students and discuss the future of the festival (Fig. 2). Some of them said the following:

- I didn't think it was important to maintain our festivals, but now I hope to change the situation.
- I wish to revitalise the festival with the ideas of our youth and with cooperation with the university students.
- The participation of students stimulated me.
- It is good to have the participation of students of the same age groups.

Now they participate in meetings with the elderly people to express their opinion; they seem to be interested in coming up with new ideas to revitalise the festivals and their settlements. Students also understand the problems faced by the depopulated area and the difficulty it encounters in maintaining its traditional culture.

Fig.2 Students and the young generation of locals, Source : author.

In these examples, the key point is the role of the students. Originally, the main role of pulling the float was assigned to teenagers and twenty-somethings. However, at present, those ranging in age from 20 to 60 are working in companies outside the settlements. Therefore, people older than 65 years must assume the main role instead of the young locals. For the elderly, it is natural to explain their knowledge and experience to a student in order to teach them. Furthermore, it may happen that the students wish to move into and live in the area. If they are tourists and not students, the local people, especially the elderly seeking to preserve their traditions, may see them as mere outsiders and display a slightly closed attitude. This difference enables a smooth acceptance of the participation of students in the festivals.

In the present situation, because the elderly take the lead in holding the festivals, the young generation does not recognise the fact that they should be the main actor, and it is difficult to boost their

motivation and cultivate their sense of responsibility. The university students' participation stimulates their local age cohorts, and the younger locals have begun to change their minds and think about ways to revitalise the festivals. In the depopulated rural areas, it is often said that a man older than 65 years is still 'young'; so a real young person hesitates or has little opportunity to communicate with the elderly. However, the students easily talk to the elderly, even to the chair of the area's neighbourhood association, and act as mediators between the young locals and the elderly.

In these cases, students cooperate with the locals to hold the festivals with a neutral status. It means they are outsiders, but also students who essentially want to study and learn, not tourists who essentially expect entertainment. These cases can be called a festival with student cooperation, not just a festival with outsider participation. Its purpose is to maintain the traditional festival, paying attention to its essential values. A festival to showcase to tourists and a festival with tourist participation risk compromising the authenticity of the traditional festival. But a festival with student cooperation aims to ensure the event is passed on from generation to generation, so preservation of cultural authenticity is included in its purpose. In addition, in the case of a festival with tourist participation, tourists enjoy the experience for its own sake, and forging a close relationship with the locals is not imperative. However, a festival with student cooperation is based on a good relationship between the students and the locals, and the relationship is reinforced year after year. Furthermore, students can create a dialogue between the elderly and the young people by acting as intermediaries. Even so, the participation of students cannot solve all problems, like funding for the festival, if it is limited to providing a helping hand.

4. Conclusion: How to Support Festivals in Depopulated Areas

This paper introduces a few cases from two angles – tourism and academic support – and presents their significance and problems in maintaining festivals in depopulated areas. Traditional or seasonal festivals and rituals in rural areas of Japan were endangered by the decrease and aging of the population. Under the new tourism-oriented

concept of festivals, they transformed from festivals done by local people who knew the event's inherent meaning to festivals to showcase to tourists. More recently, there have been transformations from festivals with tourist participation into something more experience-based. There are several objections to this transition – for instance, that it degrades the authenticity of traditional culture – but the economic benefits these changes provide cannot be denied. And the change to a festival with tourist participation may make the tourists recognise their role in a festival, not just as an audience but also as major participants.

On the other hand, support activities by university students aim to maintain the traditional culture to be handed down from generation to generation through cooperation between the locals and students. Students are more accessible to the closed rural communities to receive, because the elderly people want to pass on to the younger generation their experience with and knowledge of the traditional culture. As a result, their activity supports the continuation of festivals in the depopulated rural areas by connecting the elderly and the young generation and promoting cooperation among the community.

Concerning the revitalisation of rural areas, the word *kankei jinko* has recently come into use in Japan. *Kankei jinko* refers to a population that takes an active interest in the issues of the area. Earlier, people used the word teijujinko, which means a population that lives in the area, and the word *koryu jinko* means a population that wants to come to the area as tourists and wants to communicate with the local people. They planned tourism in rural areas to increase the *koryu jinko* and hoped some of the *koryu jinko* would eventually move there as *teiju jinko*. This approach was quantitative and easy to understand. However, the plan was ineffective, because switching from urban to rural life was quite hard economically, socially and psychologically. In addition, *koryu jinko* through tourism has some problems, such as tourism communication tending to be superficial, or locals tiring of welcoming tourists. On the other hand, the concept of *kankei jinko* is increasing the number of people who want to be involved in solving regional issues while living in a city or other regions, based on their interests and relationship with the local people, by utilising recent developments

in mobility and information technology. In other words, it does not concern itself with trying to increase the population but 'revitalizes a rural area as a low-density residential area' (Odagiri 2014) and aims to construct a creative coexistence of a city and a rural area by promoting and forming an exchange and interaction of people between a city and a rural area. It also needs a field to take an innovative action or develop human resources to promote such an interaction (Numao 2016). The transition of a festival to a type with participation of students has the potential to create an 'interpreter' who can mediate between a city and a rural area. For this purpose, both the tourists participating in a festival and the students supporting the revitalisation of local tradition should be aware of their potential to be a type of interpreter and not focus only on their own entertainment or experience. The local people also need to accept these people from outside and cooperate with them to increase *kankei jinko*. Through positive, interactive actions from both parties, the coexistence of urban and rural areas can be achieved.

References

https://kyoto-design.jp/report/19751 (accessed Oct. 15, 2018) (in Japanese).

Ikeda, Y. 2018. A Study on Cooperation between Region and University in the Student Internship Project of 'Noto Matsuri no Wa.' *Kanazawa Seiryo University Human Sciences* 11(2): 77-82 (in Japanese).

Kobayashi, K. 2005. How and Why Has the Awa Dance Become a Tourist Attraction for Several Cities in Japan? *Journal of the Faculty of International Studies Bunkyo University*, 16(1): 91-101 (in Japanese).

Ministry of Internal Affairs and Communications 2015. *The Present Situation of the Implementation of Measures for Depopulated Areas* (in Japanese).

Mitsui, I. 2006. Market and Management Anthropological Consideration of the Relationship between Company and Regional Culture. *Annals of Commercial Science* 75(1): 5-18 (in Japanese).

Numao, N. 2016. *Symphonic City and Village* Rural Culture Association in Japan (in Japanese).

Odagiri, T. 2014. *The Rural and Mountain Villages Will Not Vanish* Iwanami Shoten, Pub. (in Japanese).

Office for Measures for Depopulated Areas Implementation of Regional Development Bureau of National Land Agency, *The Present Situation of the Measures for Depopulated Areas Implementation*, 1993 (in Japanese).

Samuta, H. 2014. A Risk and Revitalization of Rural Areas in Modern Japan: An Approach Needed for Regional Cooperation, in *Theories for Revitalization of Rural Areas by Independence and Cooperation*, (Okamoto, M. Ed.), pp.7-43. Tokyo: Tokyo University Press (in Japanese).

Tokushima City Tokushima Castle Museum. 1997. *Awa Dance: Story of Past and Present* (in Japanese).

Uda, T. and Abe, Y. 2015. A Way to Preserve a Festival in a Depopulated Area: The Case Study of Sakaki Matsuri in Mochizuki Area of Saku City. *Annual Report of Regional Studies*, 37: 33-59 (in Japanese).

20. Heritage Walk Trivandrum

Elizabeth (Bina) Thomas

Abstract

How well do you know your city?; its history and heritage? To answer these questions, one has to discover the 'micro history' of the city by walking and exploring its big and small by-lanes resplendent with stories of its history and heritage. And that is exactly what Heritage Walk Trivandrum (HWT), a voluntary initiative started in October 2013, does. HWT reintroduces the city to its people, with a focus on the different historical processes that led to its formation and growth, rather than focusing exclusively on the grand monuments.

There is an urgent need to understand and document these micro-histories. While much research has gone into the study of imperial dynasties and empires, the 'history of the periphery' of vassal states and communities is often neglected. It is true for the state of Kerala. Well known the world over for its green cover and backwaters, and more recently for Ayurveda, the history and heritage of Kerala still evades not just the visitors but also the locals. Due to its geographical positioning, with the Western Ghats on one side and the Arabian sea coast on the other, the region and community has nurtured a unique socio-economic-cultural history, as feudatories with political ties with the larger kingdoms headquartered across the Western Ghats. In the modern times however, developmental and infrastructural changes are rapidly erasing what remains of the historical past.

HWT stresses on these aspects, and explores of what remains of cultural and structural heritage in Trivandrum. The initiative has grown considerably over the last 5 years. Every Walk is an exploration of the heritage value of a locality, structure, or tradition. Besides visiting the commonly known and frequented places, the Walk has covered areas and structures, for which the history is either unknown or considered insignificant, such as old markets, hospitals, educational institutions, jail and public offices. There is also an active Discussion Forum, for the more seriously inclined to go deeper into aspects of

city's history and heritage. The initiative, every walk and discussion, is being documented. There are plans for wider outreach, by making it a movement that spreads into the other districts of Kerala.

Keywords: Heritage Management; Heritage Walk; Cultural Tourism; Heritage Tourism; Trivandram.

21. Archaeological Heritage Management in Japan

Tomokatsu Uozu

Abstract

In Japan, the concept of archaeological heritage management needs to be re-examined, based on a wide framework that goes beyond the national and local governmental sectors. Although protection policies of cultural properties have achieved great success over the past few decades, there exists still the need to plan for sustainable development over the long term. Due to the Law for the Protection of Cultural Properties, Japanese national and local governments started cryopreservation programmes for archaeological resources. However, the kinetic utilisation movement has caused the law to be amended, based on two factors: (1) non-designated cultural properties were not salvaged in the case of the Great Hanshin Earthquake in 1995 and (2) the national government came to encourage tourism and local economies in response to the low birth rate and ageing society. Thus, this study focuses on three examples of the maintenance and utilisation related to this law amendment: (1) the Toro archaeological site in Shizuoka; (2) the Goshikizuka tumulus in Kobe; and (3) the Tatsuyama ancient mason site group in Takasago. The findings indicated that after the collapse of the sightseeing boom in the region, the Toro site, as an indispensable landscape for the city of Shizuoka, introduced sustainable development into its operations. Meanwhile, at the Goshikizuka tumulus, the local community gradually developed management in order to cope with the ageing society. However, at the Tatsuyama site group, the mediation between experts and local inhabitants has remained a significant problem, even though the local and national governments have supported such utilisation. The first problem of archaeological heritage management in Japan is the understanding of concept in itself, especially the process of heritagisation. Further, understanding the methodology of sustainable maintenance and utilisation is equally important. Finally, it is necessary to determine the roles of museums in relation to their respective archaeological sites.

Keywords: Heritage; cryopreservation; Preservation; Tourism, Community; Museology

1. Introduction

This paper at first presents the background to the last year's (2018) revision of the Law for the Protection of Cultural Properties in Japan. Second, three examples of maintenance and preservation of archaeological heritage performed in Japan are discussed. These examples are taken for discussion here, as the author is familiar with the details of the management of these sites. Finally, the author examines the challenges of archaeological heritage management in Japan.

The Law for the Preservation of Historic Sites, Places of Scenic Beauty and Natural Monuments was enacted in Japan in 1919 and was influenced by the British and German protectionism. In 1929, according to the establishment of the Law for National Treasure Preservation, the Japanese government organised a system in which important archaeological resources could be preserved. In 1950, after World War II, the Law for Protection of Cultural Properties was enacted. This is when the current cultural properties protection administration began. At present, the cultural properties protection in Japan (Kakiuchi 2014) is approaching a turning point.

2. Background of the Revision of the Law for Protection of Cultural Properties

In 2018, the main objective of the revision of the Law for Protection of Cultural Properties is to open channels for a change in management. Conventional methods of archaeological resources will be revised, while local authorities would attempt to comprehensively apply their own measures for preserving cultural properties. In Japan, discussions on the utilisation of cultural assets for the purpose of tourism (Yano 2014) are profound, as in any other parts of the world. This year's revision maintains this trend.

The cultural properties are classified by their group and have been individually protected to this day. However, through this revision, the local authorities would introduce their preservation and utilisation plans for regional cultural properties. Subsequently, they can partly

deregulate the plans for the purpose of tourism as authorised by the national government.

Two facts can be pointed out from this background. First, the Basic Scheme for Historic and Cultural Properties was introduced to give local public authorities an opportunity to apply comprehensive measures for the preservation and utilisation of cultural properties. Second, the issue of the Takamatsuzuka Fresco preservation contributed to the review of the conventional system. The details are explained below.

2.1. Basic Scheme for Historic and Cultural Properties

The Basic Scheme for Historic and Cultural Properties aims to improve the community's involvement in utilising and preserving cultural properties, including their surrounding environment. This scheme is a master plan to control cultural assets and records in an area, widely and precisely, regardless of their designation status.

The concept of the Basic Scheme for Historic and Cultural Properties originates from the experience of the Great Hanshin Earthquake that occurred in 1995. Hyogo prefectural authorities submitted 'the historical cultural heritage utilisation design' in 2003, which included non-designated cultural assets that were not preserved after the earthquake. The design was put in place to break down 'the problems of the conservative cultural properties protection that leaned on the designated system'.

By 2007, this viewpoint was adopted by the national government and incorporated with policies such as the revitalising of the local economy and promotion of Japan as a tourism-oriented country, which was subsequently developed nationwide (Tachibana 2018). The Agency for Cultural Affairs now promotes the Cultural Heritage Synthetic Utilisation Project and the Tourism-oriented Project, integrated with the Basic Scheme for Historic and Cultural Properties (http://www.bunka.go.jp/english/policy/cultural_properties/basic_scheme/).

2.2. The Issue of Takamatsuzuka Fresco Preservation

The Takamatsuzuka is one of the most famous tumuli of the Nara period. In 1972, the fresco, influenced by the Goguryeo culture,

was discovered inside a stone compartment with side entrances, protecting a coffin. The Takamatsuzuka was designated as a Special Historical Site in 1973 and the fresco as a National Treasure in 1974. The stone compartment was closed after excavation and permanent preservation was implemented by using large-scale preservation measures. However, in 2003, there were widespread reports of mould growing on the fresco surface for two years. The stone compartment was opened up after careful re-excavation and restoration of the fresco was carried out in the adjacent building. The restoration operations were open to researchers and the public (Sugimoto and Higo 2013, Uozu 2014, Takata and Sugimoto 2015).

The Agency for Cultural Affairs decided on a permanent preservation plan to be applied on the return of the fresco, to the burial mound in the original field, after the restoration was completed. Footnote http://www.bunka.go.jp/english/policy/cultural_properties/takamatsu_kitora/preservation.

However, the plaster, which was part of the fresco groundwork, was dismantled and stones of the compartment had a significant number of cracks. It must have been virtually impossible to rebuild the compartment in the burial mound. Actually, the Agency for Cultural Affairs stated ‘it is desirable for the fresco and the stone compartment to go back up in the mound, but even when the repair will be completed, the fresco will, at present, be displayed outside the site without returning it to the mound because it is difficult to create a safe environment for the eternal preservation of the fresco under the current scientific technical standards’.

The contradiction of the cryopreservation system is evident from this issue of the Takamatsuzuka fresco preservation. The stone compartment comprised a part of the Takamatsuzuka Special Historical Site, as it was once appointed, and it was crucial for it to be returned as a result of the conventional cryopreservation system that emphasises the unity of site, structures and features. The revision of the Law for Protection of Cultural Properties aims to resolve this contradiction.

3. Three Examples of Archaeological Heritage Management in Japan

In this paper, three examples of archaeological heritage management in Japan will be elaborated. These examples are mentioned because the author is relatively familiar with the details of the management of these sites: (i) the Toro archaeological site, (ii) the Goshikizuka tumulus and (iii) the Tatsuyama quarry site.

3.1 Toro Archaeological Site (Shizuoka city, Shizuoka prefecture)

Toro is a settlement from the last part of the Yayoi period to the beginning of the Kofun period (before 1800–2000 years), located in the Tokai district. Since 1947, archaeologists excavated a substantial number of artefacts such as pottery, stone and wooden tools, as well as paddy fields and building structures. Toro is the most important archaeological site in Japan, according to the renewal process of Japanese archaeology after World War II.

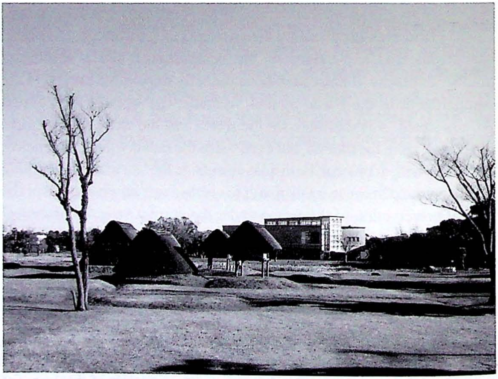


Fig. 1. Toro archaeological site and archaeology museum (Source : Author)

This site is widely known to not only the researchers but also the general public in Japan, as a significant number of history textbooks introduce it as the representative remains of the Yayoi culture. Reconstruction of Yayoi houses was implemented based on the excavation results in 1951. In the subsequent year, the site was declared a Special Historical Site. A site museum (Shizuoka Archaeology Museum) was opened in 1955. A significant number of domestic tourists and school excursions visited this site and the museum because Toro, which was broadly reported in newspapers, since the excavation, became accessible as a historical park.

However, from the late 1990s, there was concern over the amount of nationwide popularity and tourists because larger-scale Yayoi settlements, with the development of local economics, were discovered as a result of rescue excavations. A typical example is the Yoshinogari archaeological site in Yoshinogari town, Saga prefecture, in the Kyushu district. This site held evidence for long-distance trade and the existence of a multifaceted society in the Yayoi period (Mizoguchi 2013), after full-scale excavation was accomplished in an industrial estate plan area from 1986. The comparative advantage of Toro as a tourism spot was threatened when the construction plan at Yoshinogari was withdrawn and it was designated as a Special Historical Site in 1991. Eventually, the state-run Yoshinogari Historical Park was opened in 2001 and received a significant number of tourists (Mizoguchi 2006).

Since then, Toro shifted from being a tourist spot or national educational tool to a sustained utilisation location coherent with the local landscape or the local history in Shizuoka. The site museum was rebuilt in 2010, and the re-maintenance of the site remains continues even today. In the Shizuoka City Masterplan, the maintenance and promotion of Toro are specified as important historic resources. So far, Shizuoka city has not designed its own Basic Scheme for Historic and Cultural Properties. However, facilities including museums are substantially present. It is assumed that the Shizuoka city authorities do not strongly recognise the need to design the scheme because historic resources, including Toro, have been incorporated in the city's masterplan as described above.

3.2 Goshikizuka Tumulus (Kobe city, Hyogo prefecture)

Goshikizuka is a tumulus that was built facing the Seto Inland Sea in the beginning of mid-Kofun period (about 375–400 CE). It is a large keyhole-shaped mound, 194 metres in total length. It is assumed to be the grave site of an elite clan, relatively close to the imperial family of the Wa (of ancient Japan), which was a royal authority that governed a wide area of the Japanese archipelago at that time. For a long time, it had been protected as a green tract of land; however, the preservers of the mound were concerned when it was cleared and cultivated as farm land due to the food shortage after World War II. The Protection of Cultural properties Committee in Japan, the forerunner of the Agency for Cultural Affairs, planned the excavation and maintenance of this tumulus. These plans were executed by Kobe city for ¥250 million from 1965 to 1975.

As part of the historical site maintenance at Goshikizuka, paved stones were repositioned all over the slope and a substantial sequence of *haniwa* (cylindrical clay figures) were reconstructed at the berms of the mound, based on the results of the excavation, to imitate the original structure (Maruyama 2009). Although some researchers criticised this maintenance method (Mogi 1979: 26), this site has been utilised as 'the place where people can recognize the aspect of location and the outside facilities of the large-scale keyhole-shaped mound at the center of the Kinki area' for 40 years after maintenance. The view of the Osaka Bay side is, however, greatly obstructed by an adjacent apartment that was built after maintenance.

Current utilisation of Goshikizuka tumulus corresponds to contemporary Japanese society; there is a gradual decrease in birth rates resulting in the aging generation. The management of the Goshikizuka historical site came under the control of a non-profit organization (NPO) in 2006 after being under the direct governance of Kobe city for approximately 30 years. Future challenges include the installation of a site museum for the display of the excavated artefacts. Although a small guidance facility has been installed, the majority of excavated *haniwa*, which amounts to 600 in number has not yet been exhibited. Based on the results of the excavation, it is necessary to build a site museum to

act as an intermediary between researchers and citizens and tourists. In addition, currently, Kobe city does not design its own Basic Scheme for Historic and Cultural Properties. This is slightly polemic because the concept of 'the history cultural heritage utilisation design' began in Hyogo prefecture, which includes Kobe city, as mentioned above.

Fig. 2. Goshikizuka tumulus
(Source : Research Institute of History, Otemae University)

3.3. Tatsuyama Quarry Site (Takasago city, Hyogo prefecture)

The area around Tatsuyama in Takasago city is one of Japan's stone quarry centres and the only place where quarrying has been undertaken, for nearly 1,600 years since the mid-Kofun period the late 4th century, till date. In the Kofun period (3rd to 6th century), this quarry produced oblong chest-shaped and house-shaped stone coffins for chiefs belonging to the Wa, a royal authority of ancient Japan.

Ishino Hoden (the Stone Treasure Palace) was a famous place that symbolised the tradition of the Tatsuyama quarry. It is 5.5 metre

in height and an estimated 465 ton in weight, located in the middle of the Tatsuyama hill. It is probably an unfinished stone compartment protecting a coffin, which was intended to be put in the emperor's grave in the Yamato area during the Asuka period (7th century CE). At present, it is believed to be the object of worship at the Oshiko Shinto shrine. In the Edo era, from the 17th to the 19th centuries, the shrine had already become a famous place and a significant number of people who went along a pilgrimage around the 33 holy places in the Kinki district roadway and the Seto Inland Sea, also visited the Ishino Hoden. Further, it is introduced in 'Nippon (Japan)', which was a rare research text on Japanese written during the national isolation times by Philipp Franz Balthasar von Siebold.

At the time when Japan achieved rapid economic growth from 1955 through 1973, the shore in Takasago city was fully inhabited and became an industrial area, worsening the condition of the local environment. The inhabitants were divided into economic development supporters and environmental conservation protesters, and the interest in local history generally faded away.

Takasago city gradually focused on its historic resources after the end of the economic growth period. In 2003, Takasago city predominated and held the 'Tatsuyama Stone Symposium'. In 2010, Takasago city received trust from the Agency for Cultural Affairs and implemented the 'Cultural Properties General Control Pilot Project'. For enforcement of this project, there was cooperation with research organisations, such as universities (Uozu *et al.* 2010). Further, in 2011, Takasago city designed its own Basic Scheme for Historic and Cultural Properties and Ishino Hoden as well as the Tatsuyama stone quarry site achieved National Historic Site designation in 2015.

As a result, the local authorities steadily advance this work; however, a certain number of issues still exist. Public engagement on the significance of this site (Uozu 2015a), for example, as recognition of past archaeological results of research, history of technical history and circulation of the Tatsuyama stone, has not been vastly advanced, though Ishino Hoden is well known as a monument associated with spirituality integral to the Shinto shrine. Installation of a site museum is

also a necessity. In 2016, Takasago City Education Centre was relocated to the adjacent ground of Ishino Hoden. It is necessary for this centre to facilitate the learning of the Basic Scheme for Historic and Cultural Properties, achieving the participation of communities and experts.

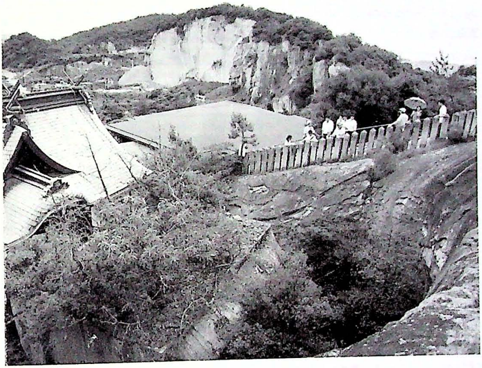


Fig. 3. Tatsuyama quarry site and Ishino Hoden (Source: author)

4. Discussion: Problems of Archaeological Heritage Management in Japan

Based on the three examples explained in the above sections, archaeological heritage management in Japan needs to resolve three issues: (i) conceptual understanding of archaeological heritage, (ii) pursuit of a methodology for the sustainable maintenance and (iii) utilisation as well as the recognition of the importance of field museums.

4.1. Conceptual Understanding of Archaeological Heritage

In Japan, the understanding of cultural heritage as a complete synonym of cultural properties has been arbitrarily adopted to this day.

In other words, archaeological heritage has been regarded merely as part of cultural properties. However, we should note that the conceptual framework of archaeological heritage is fundamentally different from that of cultural properties (Fig. 4.4).

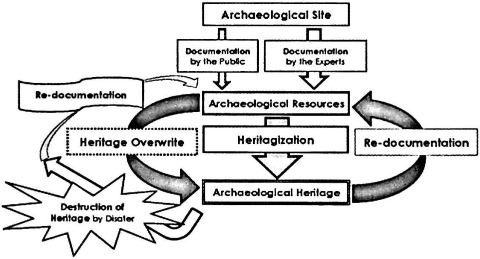


Fig. 4. Archaeological Heritage Flowchart (Source : Author)

The concept of cultural properties by the Japanese central government indispensably contains evaluation and designation by archaeological experts. The cryopreservation system of appointed cultural properties should succeed as much as possible, even if access to the public with limited knowledge of this relevant method may be unavoidable.

On the other hand, archaeological heritage is documented by not only the experts, but also the public. The documents are "heritagised" (Kristiansen 2015) with the organised decision that we should succeed by various dimensions. Originally, in this concept, the value of heritage is neither constant (Carman 2002) nor similar to the value of the academic document emphasised in cultural properties (Stakes 2000). Furthermore, benefits of the new value, including its futility or hazard,

are sometimes recognised by the people who did not belong to the first organised decision. This is 'overwrite of heritage'. In the modern world, there is an increase in this variation. 'Overwrite of heritage' is a characteristic that (Endo 2017; Azuma 2017) occurs, especially in tourism.

The concept of cultural properties has an extremely close relation to the concept of the nation or state. Therefore, it is no wonder (Matsumuro 2004) that contemporary problems in a nation or state cause a big influence and gap on the concept of cultural properties. For the central government of each country that wants to somehow bridge the gap, the UNESCO World Heritage registration, which assumes the goal of value of human universality, is a convenient means. However, the concepts of heritage and cultural properties are fundamentally different as observed above. There will be more widespread risks, depending on the direction of 'overwrite of heritage' (Yama 2016).

4.2. Pursuit of the Methodology for Sustainable Maintenance and Utilisation of Archaeological Heritage

Sustainable maintenance and utilisation of archaeological heritage must be implemented while ascertaining the differences in these two concepts. The three examples explained in this paper indicate favourable practices conscious of 'overwrite of heritage'. Although the tourism boom at the Toro archaeological site faded away, sustainable utilisation was still planned in coherence with the local residents. This may be expressed as a favourable example in which 'overwrite of heritage' was successfully executed. The reason for this success is attributed to the positive spread of the result of academic archaeological research to the public, immediately after the excavation (Oba 1948). Local authorities also incorporated the Toro site in the early stages of city planning. The archaeological sites in which 'overwrite of heritage' was successfully executed in Japan include the Kasori site in Chiba city, the Torihama shell mound in Wakasa town and the Shimonogo site in Moriyama city.

At the Goshikizuka tumulus, apart from the support by Kobe city authorities established since its designation as a National Historical Site, NPO administration received a trust and utilisation programs were

planned. It is up to the future administration to determine whether 'overwrite of heritage' will succeed. Archaeological sites under the NPO administration in Japan include the Nishinumata remains in Tendo city, the Aotsuka tumulus in Inuyama city and the Kojindani remains in Izumo city. The NPO administration is closely related to the low birth rate and the ageing generation. However, several issues still exist; the continuation of dialogue between the experts and the public at the site as well as the diffusion of their activities to the rest of the outside population needs to be considered.

In the Tatsuyama quarry site, the maintenance and utilisation programs begun along its Basic Scheme for Historic and Cultural Properties, which the central government proposed as a policy. Future administration is also expected to undertake this responsibility. Sasayama city is cited as a similar example in the development of local heritage for tourism. In reference to the Toro example, we should now be conscious of a sustainable utilisation method and not entirely depend on excessive development. In the Japanese archipelago where natural disasters, such as earthquakes, frequently occur, we must not forget to consider durability at the time of a disaster (Uozu 2015b).

4.3. Importance of Site Museums

Based on the above arguments, site museums are definitely effective for planning sustainable maintenance and utilisation. Museums should be set up as determinate places, where it becomes clear what kind of artefacts, features and structures are recognisable as archaeological documents as well as the kind of collection to be displayed for the public. In addition, conversations between archaeologists and museum educators should be activated at site museums (Ochiai 2009; Taniguchi and Igarashi 2012; Taniguchi 2015). Although the size of a site museum may not be significant enough to be called a guidance facility, it is indispensable for a broad and immediate sharing experience while visiting the site (Sakai 2017).

In this case, these types of museums, which orient to multi-dimensional dialogues (Pyburn 2011; Murata 2011), should be called on-site museums and not simply site museums. The contradiction of the cryopreservation system in the field, as indicated in the issues of the

Takamatsuzuka Fresco preservation, should be tackled on site and not in a national government building far apart from the site itself.

5. Conclusion

The conditions of maintenance and utilisation of archaeological heritage in Japan have been presently inflected as mentioned above. It follows that the social change in Japan reminds us to currently recognise the concept of archaeological heritage (Zorzin 2013; Habu and Okamura 2017). The conventional concept of cultural properties in Japan gained great success in the protection of archaeological documents; however, it is necessary to re-examine the concept itself from a wider perspective other than the national and local government sectors concerned in planning the conventional system for future sustainable maintenance (Ikawa-Smith 2011; Mizoguchi 2015).

A significant number of Japanese researchers insist that superior practices should be applied all over the Japanese archipelago (Matsuda and Okamura 2011). The theorization of coping with societal change is necessary to improve the current methods of heritage management.

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References

Azuma, H. 2017. *Genron 0: Kankoukyaku no tetsugaku* (*A Philosophy of the Tourist*) (in Japanese) Tokyo: Genron.

Carman, J. 2002. *Archaeology and Heritage*. London: Continuum.

Endo, H. 2017. *Tourism Mobilities* (in Japanese). Kyoto: Minerva Library.

Habu, J. and K. Okamura 2017. Japanese Archaeology Today: New Developments, Structural Undermining, and Prospects for Disaster Archaeology, in *Handbook of East and Southeast Asian Archaeology* (J. Habu, P. V. Lape and J. W. Olsen Eds.), pp. 11-25. New York: Springer.

Ikawa-Smith, F. 2011. Practice of Archaeology in Contemporary Japan, in *Comparative Archaeologies: A Sociological View of the Science of the Past* (L.R. Lozny Ed.), pp.675–705. New York: Springer.

Kakiuchi, E. 2014. Cultural Heritage Protection System in Japan: Current Issues and Prospects for the Future. *GRIPS Discussion Paper* 1410: 1–12.

Kristiansen, K. 2015. From the Preservation of Cultural Heritage to Critical Heritage Studies, in *Fernweh* (M. H. van den Dries et al. Eds.), pp. 47–50. Liden: Sidestone Press.

Maruyama, K. (ed.) 2009. *Shiseki Goshikizuka Kofun, Kotsubo Kofun Hakkutsutyousa, Hukugenseibi Houkokusyo (Reports of Excavation and Reconstructive Maintenance on the Goshikizuka and Kotsubo Tumuli, National Historic Site)* (in Japanese), Kobe: Kobe City Board of Education.

Matsuda, A and K. Okamura 2011. Introduction, in *New Perspectives in Global Public Archaeology* (K. Okamura and A. Matsuda Eds.), pp. 1–18. New York: Springer.

Matsumuro, T. 2004. Bunkazai hogo to nationalism (Cultural Properties Protection and Nationalism) (in Japanese), in *Ohkan suru Kokogaku (Transiting Archaeology)*: Essays of Ohmi Shell Mound Research Group 2, pp.53–57. Otsu: Ohmi Shell Mound Research Group.

Mizoguchi, K. 2006. *Archaeology, Society and Identity in Modern Japan*. Cambridge: Cambridge University Press.

Mizoguchi, K. 2013. *The Archaeology of Japan*. New York: Cambridge University Press.

Mizoguchi, K. 2015. A Future of Archaeology. *Antiquity* 89: 12–22.

Mogi, M. 1979. Hakubutsukan souto shisetsu no seibi (Maintenance of the Faculties Corresponding Museums) (in Japanese). *Hakubutsukan Zasshi (Museology Magazine)* 3-4:22–31.

Murata, S. 2011. The Role of Archaeology and Its Challenges in Japanese School Education, in *New Perspectives in Global Public Archaeology* (K. Okamura and A. Matsuda Eds.), pp. 227. New York: Springer.

Oba, I. 1948. *Toro Iseki Kenkyu (Research on Toro Archaeological Site)* (in Japanese), Suwa: Ashikabi Library.

Ochiai, T. 2009. *Yagai Hakubutsukan no Kenkyu (Research on Field Museums)* (in Japanese), Tokyo: Yuzankaku.

Okamura, W. 2014. Henka shi seityou sitsuzukeru Toro iseki (The Toro Archaeological Site: Changing and Developing) (in Japanese). *Isekigaku kenkyu (Journal of the Japanese Society for Cultural Heritage)* 11: 100–103.

Pyburn, K. A. 2011. Engaged Archaeology: Whose Community? Which Public? In *New Perspectives in Global Public Archaeology* (K. Okamura and A. Matsuda Eds.), pp. 29–41. New York: Springer

Sakai, H. 2017. Bunkazai hogo kara mita shiseki seibi to hakubutsukan (Maintenance of the Historical Sites and Museums at the Viewpoint of Cultural Properties Protection) (in Japanese), *Hakubutsukan kenkyu (The Museum Studies)* 52(7) : 7–9

Stakes, R. 2000. *Debate the Archaeological Heritage*. London: Duckworth.

Sugimoto, H. and H. Higo 2013. Kokuho Takamatsuzuka kofun hekiga syuuri sagyousitsu no koukai sankaki (Report of Exhibition of the Restoration Workroom of Takakamatsuzuka Fresco, National Treasure) (in Japanese), *Kokogaku Kenkyu (Quarterly of Archaeological Studies)* 60 (2) : 1–4

Takata, K. and H. Sugimoto 2015. Takamatuzuka kofun, Kitora kofun hekiga hozon syufuku sagyou no tokubetsu koukai (dai 3 kai) ni sannka shite (Report of Third Special Exhibition of the Restoration Working of Takamatsuzuka and Kitora Frescoes) (in Japanese). *Kokogaku Kenkyu (Quarterly of Archaeological Studies)* 62 (2) : 5–8

Tachibana, M. 2018. Rekishi bunka kihon kousou no torikumi to kadai ni tsuite (On Endeavor and Problems of Basic Scheme for Historic and Cultural Properties) (in Japanese), in *Nihon koukogaku kyokai dai 84 kai soukai kenkyuhappyou youshi (Proceedings of the 84th Japanese Archaeological Association General Meeting)*, pp. 202–203. Tokyo: Japanese Archaeological Association.

Taniguchi, S. 2015. Maizoubunkazai to chiiki hakubutsukan (Buried Cultural Properties and Local Museums) (in Japanese), *Kokogaku Journal (The Archaeological Journal)* 676 : 20-24.

Taniguchi, S. and S. Igarashi 2012. Iseki to hakubutsukan no aru fuukei (Landscape Including Archaeological Sites and Museums) (in Japanese), in *Kanko Koukogaku (Tourism and Archaeology)*, pp.126-134, Tokyo: New Science Publishing

Uozu, T. 2014. Takamatsuzuka kofun hekiga syuuri sagyositsu dai 2 kai tokubetsu kokai ni sanka shite (Report of Second Special Exhibition of the Restoration Workroom of Takakamatsuzuka Fresco) (in Japanese). *Kokogaku Kenkyu (Quarterly of Archaeological Studies)* 61 (1) : 9–11.

Uozu, T. 2015a. Tatsuyamaishisei sekkan no seisan, ryuutsuu no tenkai to ishitsukuri syuudan (The Development of Production and Distribution of Stone Coffins Made from Tatsuyama Stone) (in Japanese), in *Kouiki ni syozai suru bunnkazaigun no tyousa to katsuyou (Investigation and Utilization of Properties Located on Broad Area)*, pp.39-52. Kobe: Executive Committee for Utilization and Revitalization of History Cultural Heritage in Hyogo Prefecture.

Uozu, T. 2015b. Kokogaku siryou to bunka isan tono kannrensei ga bousai ni hatasu yakuwari (The Role of Relationship between Archeological documents and Cultural Heritage for Disaster Prevention) (in Japanese), in *Kii no chi ooini furuu (The Great Earthquake Occurred in Kii Area)*: Proceedings for the Special Exhibition Memorial Symposium in Autumn 2015, pp. 35–46,

Wakayama: Wakayama Prefectural the Kii Fudokino Oka Archaeological Museum.

Uozu, T., W. Fukui, K. Shimizu and T. Sugasawa 2010. Hyogo-ken Tahasago-shi ni okeru rekishibunka isan no gennjyou to igi ni tsuite no sougouteki bunseki no kokoromi (Synthetic Analysis about Present Situation and Significance of Heritage in Takasago City, Hyogo Prefecture) (in Japanese), *Isekigaku Kenkyu* (*Journal of the Japanese Society for Cultural Heritage*) 7: 245-252.

Yano, K. 2014. Bunkazai Gyosei no Gendaiteki kadai (Modern Issues on Administration of Cultural Properties) (in Japanese), *Bunkacho Geppo* (*Agency for Cultural Affairs Monthly*), pp. 525-527.

Yama, Y. 2016. Bunkaisan to iu bouryoku (the Violence Named Cultural heritage) (in Japanese), in *Nihon koukogaku kyokai dai 82 kai soukai kenkyuhappyou youshi* (*Proceedings of the 82th Japanese Archaeological Association General Meeting*), pp.168-169. Tokyo: Japanese Archaeological Association.

Zorzin, N. 2013. The Political Economy of Japanese Archaeology: Reflective Thoughts on Current Organisational Dynamics, *Japanese Journal of Archaeology* 1: 5-21.

22. Bharathanatyam: A Glorious Spiritual Heritage

A. Vadivudevi

Abstract

Bharathanatyam is one of the rich cultural heritage traditions of Tamil Nadu. It is one of the oldest dance forms of India. It was nurtured in the temples and courts of kings in southern India from the early times. Later it was codified and documented as a performing art in the 19th century by four brothers known as the Thanjavur Quartet, whose musical compositions for dance form the bulk of the Bharathanatyam repertoire even today. The art was handed down as a living tradition from generation to generation under the Devadasi system through which dancing women were dedicated to temples to serve the divinities by their performing arts. Dance was a part of the 16 offerings to the Lord Spiritual in the temples. The Lord is considered as the source of all arts (divine inventor) and so art was sacred and spiritual. The dancing art should be a vehicle not only for delight, but also to elevate the devotees to spiritual heights. This was the underlying belief in integrating the art of dance with the temple rituals. The link between dance and temple is exemplified through sculpture. The ornamental dance friezes in the temple structures often serve as visual illustrations of the style of dance known to our ancient people. Our ancestors attributed anything beautiful only to divinity. So, Lord Siva was considered as the source of dance and thus this glorious art assumed sacredness and spirituality. It is obvious that the art of dance was born and grew up in Tamil Nadu as a spiritual art and flourishes even today as a supreme spiritual art in the house of its birth. We need more efforts to preserve this important art form.

Keywords: Bharathanatyam; Thanjavur Quartet; Dance Heritage; Intangible Heritage

Introduction

Dance is the earliest language of the human race. In the primitive ages, when the languages had not developed, ancient humans used gestures to communicate. Even after the languages came into

existence, humans continue to use gestures along with languages to express themselves effectively. Dance is nothing but an expression of the human mind and a wide range of concepts through artistic and elegant body movements. Gestures coupled with rhythmic movements and aesthetic expressions can be defined as dance. The history of dance is thus as old as humanity itself. In some ancient cultures, it developed into a beautiful form of art combined with music, drama, literature and religion and had evolved as the cultural heritage of the region of its origin. One such art form is Bharathanatyam, a typical and classical art form of Tamil Nadu.

Bharathanatyam is a rich cultural heritage of Tamil Nadu. It could be one of the oldest classical dance forms of India. It is a dance form based on a firm foundation of our religious and spiritual values. Its underlying tone focuses on devotion and the ultimate union of the soul and the supreme.

Origins and History

Bharathanatyam, a dance form which traces its origin from the hymns in the Rig Veda, is a living oral tradition that has evolved in phases – from the temple, to the court and to the stage in the public arena at present. In the ancient days, the art of dance was nurtured in the temples. The *agamic* traditions and the Bhakti movement gave a ritual and religious orientation to this art. It was a part of 16 offerings to the god. It is interesting to study how far did the temples form the nucleus for fostering and cultivating the art of dance in Tamil Nadu. By virtue of religious sanctity, royal patronage and social support, the temple in the earlier days blossomed into a vibrant cultural centre and in due course paving the way for fine arts and religion to be inextricably intertwined.

The Lord is considered as the source of all arts and thus art assumed sacredness and spirituality. It should be performed in the august presence of Lord Siva and should be an act of dedication to Him. The art should be a vehicle not only to delight, but also to inspire and elevate the devotees to spiritual heights. This was the underlying belief in integrating the arts of dance and music with temple rituals (Raman 1981: 107).

For the promotion of the art of dance in the temples, enormous grants were offered by the kings, nobles and the laity. Many dancing women and musicians were appointed in the temples who in turn were given due respect in the society because of their extraordinary proficiency in the fine arts. Thus, the twin fine arts of dance and music served as tools for the consolidation of society in Tamil Nadu. The link between the temple and the dance is visually exemplified in the sculptures, which are seen in many temples. It is very obvious that dance was the artistic theme for embellishing the architecture of the Hindu temples interwoven with religion. The sculptors who witnessed the performances of the dancing women in the temples were fascinated by their performances and were delighted in devising the theme of dance as ornamental friezes in the temple structures. The basement of the temples at Darasuram, Chidambaram and Tribhuvanam contain several sculptures of women dancers single and in groups, accompanied by musicians. Similarly, the dance sculptures portrayed at the very entrance gateway of the many temples in Tamil Nadu obviously focus on the patronage of the ruling dynasties towards the cultural development of the country. The construction of gigantic temples in Tamil Nadu from 7th century onwards and their existence at present serves as a living testimony of our ancient people's love for the temple arts. The sacred texts of Sivagamas prescribe dance as a mode of worship and the consecration of dancing girls for performing ritual dances and offering them to the presiding deities were largely followed.

The practice of engaging women experts in dance and music who were called as Devaradiyars was initiated during the reign of the Pallavas. The Pallavas were the forerunners in innovating immortal works of art, both tangible and intangible, i.e. temple building, sculptures and paintings, and in perpetuating performing and plastic arts in the temples. Though the Pallavas were the pioneers, due credit must be given to their successive rulers, the Cholas, who realised the value of this cultural tradition and not only preserved but also enriched it considerably. The political supremacy of the Cholas reached its peak under the able ruler Rajaraja I and his achievements in the field of culture and fine arts reached unprecedented heights. A very long inscription in the Brihadeeswara temple of Thanjavur, bearing the date of 29th regnal

year of Rajaraja I records an order of the king documenting the grants assigned to the people attached to temple activities. The name of the 400 women dancers are mentioned along with their residing streets (SII 2, 66).

Thus, the ambition of the Chola kings was to convey the prosperity and achievements in the promotion of fine arts. But their strong underlying belief in integrating the performing arts with the temple ritual reflects their devotion to the Spiritual Lord, who was revered by them as a source of all arts. They attributed anything beautiful only to divinity. Hence, Lord Shiva is considered as the source of dance and thus this glorious art form of dance assumed sacredness and spirituality. The religious force therefore was a great formative factor in the development of this art and its link with the temples. It is true that the art of dance had subsequently evolved into a social pastime, undergoing a lot of changes over the centuries, but the primary objective was to employ the arts to interpret the Universal and the idealistic ideas and sublimate them by the elimination of the individual personality (Krishnamurthy 1966: 71).

The art of dance in due course started entering the royal courts. The art of dance, which was handed down as a cultural heritage from generation to generation under the Devadasi system, got redefined in the beginning of the 19th century by the contribution of four talented brothers known as Tanjore Quartet: Chinniah, Ponniah, Sivanandam and Vadivelu (Seetha 2001: 115). The basic movements pertaining to the art of Bharathanatyam were codified by them in the name of *adavus*. The four brothers choreographed many musical compositions and those form the bulk of Bharathanatyam repertoire even today.

Important Concepts

The word *adavu* denotes a basic unit of movement in dance. Many *adavus* are formulated and are taught in a systematic order to the students who undertake training in Bharathanatyam (Vatsyayan 1992: 26). Many *adavus* are combined and choreographed in the dance items to present them as sequences based on the rhythmic pattern of the musical composition.

The *abhinaya* in Bharathanatyam evokes the subtle feelings of the audience by its nine-fold sentiments. We call them as *navarasas* (Narayanan 1998: 44). They are very dominant and the communication of ideas to the audience is done and is made as effective through the nine sentiments. Eyes are very important to express these nine sentiments.

Transformation of the Art Form

Bharathanatyam gained its place in social realm only after its revival in 20th century after the introduction of the *Devadasi* bill in 1930 (Subrahmanyam 2003). Today we find that this classical dance form is accepted worldwide. It has become a cultural identity for many Indians. Today parents feel proud if their daughter or son want to learn this art form. This art form has opened a plethora of opportunities for young learners. Most of the universities have started departments for performing arts. Not only that, the government of India has introduced dance subject at the school level also. This has opened substantial job opportunities for dedicated and hard-working students.

Fig. 1. Nrtta in Bharathanatyam (Source : author)

Today Bharathanatyam is one of the most popular and widely performed dance styles and is practiced by male and female dancers all over India. Due to its wide range of rhythmic movements (*nrtta*) (Fig. 1) and expressive skill (*abhinaya*) (Fig.2) , it has found niches in far-flung corners of the globe where it is preserved as a cultural and spiritual heritage. It is obvious that the art of dance was born and grew up in Tamil Nadu as a spiritual art and flourishes even today as a supreme spiritual art in the place of its birth.

Fig. 2. Abinaya in Bharathanatyam (Source : author)

Bharathanatyam as a career is not a forbidden thought anymore. The entertainment sector today has created huge opportunities for those who can perform and choreograph this classical dance form with innovative ideas. If we look around, we can infer very well about the evolution of this art. Several dance festivals in the name of Natyanjali have been introduced in popular Siva temples of Chidambaram, Thanjavur, Kumbakonam and in the recent days at many other temples all over Tamil Nadu. This has enabled the promotion of this beautiful

art form to the next stage. Moreover this art has been imbibed as an indispensable extracurricular activity by every female child as it helps her to achieve a healthy body and mind. Hence it is the duty of each and every citizen to nurture this art form with passion and pass it on to the next generation with utmost care.

Suggestions for the Preservation of this Dance Tradition

For preserving as well as for promoting Bharathanatyam, the intangible art tradition, several measures have to be undertaken necessarily. Though many private institutions have been established to impart this art form to the younger generation, many universities should come forward to start a separate department for dance like other subjects. If the universities are not in a position to have a separate department, at least, they could encourage the passionate students by offering integrated courses (double degree programme) by associating with the deserving private institutions. Though government has allocated special funds for the promotion of traditional arts in the budget itself, yet sufficient employment opportunities are to be created to the deserving artists in order to make them remain in the same profession and encourage others to join this profession. Media such as film and TV should promote this traditional art form without any kind of partiality. Apart from giving importance to the popular artists, opportunities should also be given to the young budding artists who come to limelight with sole aim of propagating this classical art. The Department of Tourism should promote this art form by giving adequate opportunities to the professional artists to uplift our cultural heritage. Traditional Indian dance form receives good support from the Indian diaspora and also among non-Indians. This spiritual art form can be promoted, like the way in which *yoga* is promoted, in many contexts of the world. Through such an act, universal brotherhood could be established for sustaining peace and harmony in the world.

References

Krishnamurthy, S.R. 1966. *The Cultural Developments in the Chola Period.* Chidambaram : Annamalai University.

Narayanan, Kalanidhi 1998. *Aspects of Abhinaya.* Chennai : The Alliance company.

Raman, K.V. 1981 Temples as Patrons of Dance in *Dances of India*. Madras : Vivekananda Kendra Patrika.

Seetha, S. 2001. *Tanjore as a Seat of Music*. Chennai : University of Madras.

SII, Vol. II, No. 66 *South Indian Inscriptions*. New Delhi: Archaeological Survey of India.

Subrahmanyam, Padma 2003. *Karanas*, Vol. I, Common Dance Codes of India and Indonesia. Chennai : Nrithyodaya.

Vatsyayan, Kapila 1992. *Indian Classical Dance*, New Delhi : Ministry of Information & Broadcasting, Govt. of India.

23. Conservation of Heritage and Cultural Tourism Resources: Contemporary Cost-Effective Approaches - A survey

A. Vinodan and S. Meera

Abstract

Purpose: Heritage and cultural tourism, which is a niche yet a promising segment in tourism, holds relevance for India, as the country is well known for its rich and varied heritage and culture. The strategies on conservation of the tangible and intangible properties, which provide immense scope for cultural and heritage tourism, need to be revisited in the contemporary context where there are serious deterrents in the promotion of tourism in this domain.

Methodology: In this paper, cultural tourism resources and conservation strategies have been analysed from two perspectives, namely, tourist dimension and stakeholders' dimension.

Findings: Resource conservation in cultural tourism resource need to be cost-effective and contribute towards sustainability in the long run. This is possible by evolving approaches that are both tourist-centric and stakeholder-centric. Propagation of responsible tourism practices and visitor management strategies along with proactive participation of the stakeholders, including destination managers and resident communities, will contribute to resource conservation, both from human causes leading to depletion or deterioration of quality of tourism resources on one hand and also towards continuous surveillance and maintenance of the resources for the future leading to preservation, on the other.

Managerial Applications: The role of conservation is inevitable and requires support and intervention of various stakeholders of tourism. Creation of awareness can lead to an understanding and appreciation of the value of tourism resources among the tourists. Heritage and tourism policymakers can be involved in such efforts. Conservation

and maintenance go hand in hand and efforts directed towards one component can complement the other. Destination managers need to pay attention to resource management strategies by involving heritage managers, tourists and community members.

Limitations: The study is on the basis of specific domain and may not have much relevance in the context of other tourism resources.

Keywords: Culture Tourism; Heritage Tourism, Cultural Resource management; Community Participation; Visitor Management Strategies.

Introduction

Cultural heritage is related to tangible properties and intangible attributes (ICOMOS 2002) and is often construed as an expression of different facets from a broad spectrum, including the ways of living, developed and passed by one community to another from one generation to another, which comprises practices, customs, artistic expressions, places, objects and values. However, the intention is clear, as according to Feather (2006) 'it is a human creation intended to inform' the mass, through human activities, as cultural heritage produces tangible representations of the intangible value systems, beliefs, traditions and lifestyles. Visible and tangible traces from antiquity to the recent past are considered as an essential part of culture.

According to Bitelli *et al.* (2019), architectural heritage – places, monuments, historical buildings – represents a collective memory of the past, a symbol for society and an attraction for tourists. Proper documentation, valorisation and preservation therefore become necessary. Architectural restoration has gained momentum across the world, particularly in India where there is a great need of such conservation efforts. As the degradation is continuing due to various human interventions like tourism and lack of maintenance, restoration has become the need of the hour (Albourae *et al.* 2017). As Pirok *et al.* (2019) had stated, conservation of objects for future generations requires extensive research into the identity of the colorants and their degradation as the current state of a cultural heritage object may no longer feature the originally applied colorants.

Through there is a lot of evidence of incompatibility between tourism and heritage conservation (Berry 1994; Jacob and Gale 1994; Nuryanti 1996; Porter and Salasar 2005), heritage assets often provide opportunities for cultural and educational experiences and thus are potential resources for tourism as well (Olsen 2006). Moreover, as Levy and Kocher (2009) have pointed out, complementarily, tourism strengthens the pecuniary rationale for heritage conservation, as it may contribute significantly to the local economy by creating business and employment opportunities. Generally, in tourism-driven conservation, intensely visited monuments are given priority and less visited monuments are neglected for want of conservation financing. This may, in turn, lead to the deterioration of less visited sites and monuments. Tourism development provides a strong economic justification for the conservation of heritage assets, especially for historic towns suffering from stagnation or decay, where economic rejuvenation is imperative for their revival (Paul and Roy 2017). At this juncture, the study intends to explore various ways and means of adopting cost-effective strategies for tangible heritage conservation in the context of India.

Objectives

The strategies on the conservation of the tangible and intangible properties, which provide immense scope for cultural and heritage tourism, need to be revisited in the contemporary context. The issue of conservation has emerged as one of the serious deterrents in the promotion of tourism at the heritage sites. The study aims to identify and promote various cost-effective conservation strategies to tangible heritage properties, while promoting heritage tourism.

Review of Literature

Culture and Heritage

Cultural heritage is unique and distinct in the context of built environment (buildings, townscapes and archaeological remains), natural environment (rural landscapes, coasts and shorelines, agricultural heritage) and artefacts (books and documents, objects, pictures). Heritage is not only manifested through tangible forms such as artefacts, buildings or landscapes but also through intangible forms like voices, values, traditions and oral history (Bruno *et al.* 2018). However,

most of such heritage properties interlinked with tangible presentation are perceived in the form of traditional skills and technologies, religious ceremonies, food, dressing, forms of shelter, storytelling and performing arts. Intangible cultural heritage, as defined in the UNESCO Convention (intangible cultural heritage), is manifested in domains like oral traditions and expressions, performing arts, social practices, rituals and festive events, knowledge and practices concerning nature and the universe as well as in traditional craftsmanship (Sarma 2012).

Heritage and Cultural Tourism Resources

The relationship between historical and cultural potential of the country and tourism is well established. According to Ismagilova *et al.* (2015), as objects/properties pertaining to cultural and historical heritage are capable of attracting tourists and generating profits, they influence economic development.

Ismagilova *et al.* (2015) also state that the motivation of tourists to visit destinations of cultural and historical importance could be due to their acquaintance with history or historical objects and the informative and educative value obtained from these cultural resources. On the basis of tourist motivation, the historical and cultural resources can be subdivided into following types (Wang 2012; Ismagilova *et al.* 2015):

1. Cultural resources consisting of monumental, graphic, art and crafts, other art forms including events associated with cultural development and life of people. They include material and non-material works expressing creativity of various artisans and musicians.

2. Historical resources with a motivation to know a country's history, historical monument visits and other places associated with historical developments reflected through complexes and remnants of ancient architecture.

3. Archaeological resources with motivation to understand a country's archaeology, visitation to monuments of antiquity and sites associated with excavations.

4. Religious resources motivated by an interest in religion, customs and rituals of particular religion and pilgrimage places.

5. Ethnographic resources with motivation to understand the cultural aspects of specific ethnic group or culture, language or objects, lifeways, language and ethnic creativity.

Heritage and Cultural Tourism

According to Taylor (1974), tourism industry itself assumed that the tourists are highly interested in the cultural aspects of the destination. Culture is one such segment that supplies different consumable (tangible and intangible) products to the tourism industry, and even now it is sold as an 'all-people product'. Therefore, it is evident that capitalization of cultural heritage both in tangible and intangible forms is the core of cultural tourism development and involves all segments of society. As Robinson (2001) stated, while delivering cultural consumables, the role of community, ethnic and religious groups play a significant role; thus, cultural tourism involves different stakeholders. According to Hughes (2000), the relationship between tourism and culture is bound to enhance and sustain cultural resources and bring revenue. Most often the product itself is positioned in such a way that can retain distinctive features at physical as well aesthetic aspects of consumption. At this juncture, where mutual benefits are derived by tourism as well as culture in showcasing its variety through product development, conservation and management are of great significance.

Cultural Resource Management

Management, i.e. maintenance and governance, of cultural and heritage properties has been challenging as there is a continuous need to fulfil the requirements pertaining to protection of properties and commercialisation (Psomadaki *et al.* 2018). The role of commercialisation and preservation are both justified from an economic perspective; historic resources can be utilised for generating revenue through tourism leading to economic growth and regional development, while conservation of historic resources is bound to foster tourism visitation, from a long-term perspective. According to Harvey (2005), heritage resources and their conservation have contributed towards

urban regeneration and rural revitalisation schemes and enhance the competitiveness of destinations, thus emphasising on the need for conservation.

The mutual benefits between tourism and culture and heritage resource conservation is evident (Chhabra 2009). However, conservation of resources is mandated due to commercialisation caused by tourism. According to Ho and McKercher (2004), commercial activities may damage historic resources, through physical damage caused by tourist use or through commodisation, trivialisation and standardisation. Cultural resources are an important factor in the human environment, which needs to be managed in the context of all other biological, social and geophysical elements in that environment or ecosystem. Good environmental stewardship requires affirmative resource management, including management of tangible and intangible cultural resources (Adu-Ampong 2014).

There is an inevitable dichotomy between satisfying the pressure for economic growth through tourism and protecting the cultural heritage sites and monuments that are at the heart of tourism (Smith 2006; Su 2011). Therefore, there is a need to establish quality standards and systems of good practice to protect the past relics and safeguard the country's cultural heritage. The key lies in finding the right balance between encouraging the expansion of cultural tourism and safeguarding heritage sites and monuments by keeping the volume of tourists to heritage travel destination areas within sustainable limits (Hunter 2015).

A study conducted by the United Nations Economic and Social Council made very significant findings in favour of tourism. It indicates that researches conducted in Asia-Pacific and Caribbean regions have failed to produce much evidence of major destruction of local culture due to tourists' influence. The findings indicate that tourism can assist in preserving customs and culture by providing incentives to invest in cultural and heritage resources and promote them. If properly managed and promoted, local culture can be given an impetus by the presence of tourists (Commission on Sustainable Development 1996)

According to Kundson (1999) and Waterton and Smith (2010), cultural resource management mainly aims at historic preservation. Protection of cultural resources involves knowledgeable and caring collaboration of resource specialists, material scientists, decision-making land managers and living community with ties to heritage resources. This, in turn, involves each participating community and individual managing the interfaces among themselves (Zancheti and Hidaka 2011). This is done by learning something about other groups' values and special languages and their operating constraints and opportunities, and about the overall public benefits and costs of cultural resource management decisions. Cultural resources management is the vocation and practice of managing cultural resources, such as the arts and heritage. It incorporates cultural heritage management, which is concerned with traditional and historic culture (Kundson 1999).

Methodology

Background Analysis

Six historical monuments were chosen in this study to understanding the conservation and visitor management practices in South India. These monuments are found to be religiously important. These destinations are Charminar in Hyderabad, Telangana; Hampi and Hoysaleswara temple in Karnataka; Brihadishvara temple in Thanjavur and Mahabalipuram in Tamil Nadu and the Jewish synagogue in Kochi, Kerala. Among them, Hampi in Karnataka, Brihadishvara temple and Mahabalipuram in Tamil Nadu are UNESCO world heritage sites and rest are managed by the Archaeological Survey of India (ASI). All these destinations receive large numbers of pilgrims/tourists, both domestic as well as foreign. The selection of the sites is based on the investigative possibilities in the context of maintaining and conserving their cultural heritage, possibility of providing quality experience to the tourists, promoting tourist activities at the destinations, improving the socio-economic well-being of the local community and the possibility of achieving sustainable tourism development.

Data Source

Data required for the study incorporated experts' in-depth interview and observation. Visits to the above-mentioned destinations

were made during January to June 2018 to collect primary data through interviews followed by participant observation. Duration of the interview and observation segment of the study lasted for 6 months. Most of such visits were planned along with tourists, guides who are familiar with geography and the specification of the monuments under study. A minimum of three to five people from the stakeholders' side as well as eight to ten tourists were interviewed from each monument. The total number of stakeholders interviewed were 46 and 74 tourists from the same destinations. The investigators approached ten monuments of southern states of India, out of which five were managed by the ASI and five were under state archaeology departments. Major stakeholders interviewed were guides, transport operators, shopkeepers and local community members. Government officials were not a part of the interview process, as they are already involved in the maintenance and management of the site, and their ideas are already in practice. Most of the tourists, nearly 70%, were pilgrims and remaining were general tourists visiting historical monuments. The number of pilgrims was high as most of these destinations were construed as religious sites in one way or other. Out of 74 tourists, 14 respondents were foreign nationals, mostly from Southeast Asian nations and Europe. Interviews were held in and around the monuments to have first-hand information as well as to visualise the aspects of discussion in a pragmatic manner. Each destination was finalised based on its touristic significance as well as the spatial distribution of the attractions. As the cost-effective conservation strategies are considered to be the need of the hour, it is imperative to garner onsite responses from the destinations that are significant for tourists and also possess heritage value. Investigators focused on conservation with respect to the responses of the interview and further interacted with various stakeholders for other variables under study. This practice helped to remove the redundancies and finalise the relevant variables for the study. Literature on this domain was also found very less in number, so contextual examination through interviews and observation could enrich the variables under study to meet the objectives. The study incorporated a few research reports and website information of various monuments of historical and heritage significance under the study area.

In-depth Interviews

Open-ended, in-depth interview is a discovery-oriented method used in qualitative research to obtain detailed information about a topic from various respondents to explore in depth a point of view, experiences, feelings and perspectives. The present study considers in-depth interview as one of the major source of primary data collection mainly to meet the following objectives: (a) to narrow the focus of the research, (b) to identify questions to be explored through the research, (c) to retrieve insights and explore the reality from the concerned respondents and (d) to get response on one-to-one basis.

In the present study, in-depth interviews were conducted with experts or stakeholders one way or other involved in tourism and related activities in and around historical monuments that were considered for this study. Tourists were also identified in the study to conduct data collection, who can give information required to meet the second objective of the study.

Criteria for Selecting Interviewees

In order to identify the respondents of the study, the following criteria have been followed:

a) Stakeholders involved in the transportation services, guiding and hospitality services in and around the historical monuments for the past five years along with vendors and support service providers having five years of experience in the same vicinity

b) Stakeholders who are having operations within two-kilometre radius of the monument

c) Stakeholders serving or connected to tourists/pilgrims visiting the destinations

d) Tourists who have visited other historical monuments as well as repeat visitors of the sites under study.

Development of Interview Questions

The study used a semi-structured interview outline for in-depth interviews. The criteria consisting of evaluation, context, process,

prediction and symbolism proposed by Thomas (2003) were adopted to frame the questions.

a) *Evaluation*: Questions pertaining to the evaluation were used to explore respondents' similar experience in other attractions of historical importance for tourists and stakeholders serving this destination for last five years.

b) *Context:* Respondents (stakeholder and tourists) were asked to express their opinion on conservation possibilities at the destinations without compromising the aesthetic value of the monuments and visitors' rights.

c) *Process*: Respondents were prompted to express on different problems that they face while visiting these destinations and the general constraints observed by the stakeholders both during peak as well as lean seasons. Local-specific remedial or corrective mechanisms to address the problems encountered without altering both physical shape and aesthetics were also sought.

d) *Prediction*: Predictive questions were placed to explore prospective probabilities and various outcomes of application suggested practices to address the perceived risk associated with programme implementation.

e) *Symbolism*: Respondents were asked to suggest how the suggested practices can be implemented by considering the location-specific constraints in mind. Such questions were administered among stakeholders as they have a better understanding about the locality.

Interview Process

Based on in-depth interview guide with open-ended questions, the interview was administered to respondents to elicit their response.

The following questions were asked to stakeholders: What are the major constraints visitors share with you about this site? What

are the major constraints you could identify in managing visitors at the destinations? What are the different and appropriate strategies to improve visitor experience at the destinations? How can the strategies can be implemented at this site?

Tourists were asked following questions: What are the major issues you could identify pertaining to cultural properties at the destinations? What are the different suggestions for overcoming these problems? Can you substantiate with any other similar destinations or monuments managed similar problems in a better way?

The following questions were asked to both stakeholders as well as tourists: How can the relationship between conservation and visitor management be linked? Finally, they were asked for other related comments relevant to the topic.

Interview Results

Cultural Resource Management Strategies

Appropriate and effective strategies for safeguarding intangible heritage are possible through cultural resource management. Safeguarding cultural heritage means adopting measures aimed at ensuring viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement and transmission, particularly through formal and nonformal education, as well as the revitalisation of the various aspects of such heritage (UNESCO 2003b).

Tourists' Dimension

1. *Regularity in cleaning and maintenance*: Regular maintenance of cultural properties by dusting, washing with or without water, appropriate chemical treatment or protective covering depending on the material and finish of the cultural property.

2. *Convenient time slot*: Visitation timings can be fixed as per choice of the tourists, but on the basis of carrying capacity and computerised information to regulate the number of visitors at a particular timing to avoid overcrowding.

3. *Restructuring*: Restructuring monuments/cultural properties without losing its authenticity as per guidelines of government and international agencies.

4. *Alternative ambience*: Develop an alternative ambience for developing facilities for photography and sightseeing to prevent crowding in certain strategic locations within the properties.

5. *Site communication*: Presence of required signage and indications on various do's and don'ts through appropriate signboards and electronic displays lending clarity to tourists.

6. *Technology-driven experience*: Certain experiences, stories, lore or historical significance can be thematically displayed through light and sound shows or electronic games, rather than taking the tourists to all the locations of the cultural/heritage property.

7. *Enhanced government support*: Government support is required to provide additional capital for enhancing of site through necessary infrastructure or property renovation efforts.

8. *Community-driven strategies*: Community can be encouraged through appropriate training, education and economic incentives to initiate socially responsible campaigns for creating awareness among tourists about the need for conservation of heritage and culture.

9. *Integrated development*: Community development programmes can be merged with conservation programmes by involving community participation providing spill over effects and integrated development.

10. *Responsible promotion*: Development of promotional efforts and social advertisements protecting the integrity and authenticity of the tangible/intangible properties pertaining to culture.

11. *Complete ban*: Emphasis on complete ban on visitation by closing certain areas, in case of repairs and other exigencies.

12. *Crowd management*: Dispersing crowd by introducing/promoting other objects or attractions like light and sound shows and museums relevant to the prime attraction.

13. *Responsible interpretation*: Educational and responsible interpretation involving adoption of low-impact techniques during visitation and keeping tourists abreast of impact of visitation on cultural/heritage properties.

14. *Season-specific strategies*: Implementing quota system to manage crowds in the peak season or dispersing visitors to manage crowd. Concentrating crowd strategies can be followed in the off season. Season refers to a specific time frame, which includes vacation or festival times.

Stakeholders' dimensions

1. *Delimit visitation*: Visitation can be restricted or prohibited in threatened zones or group sizes can be predetermined according to seasons.

2. *Zonation*: Zoning certain areas exclusively for photography, research or education and directing tourists to more resilient zones depending on tourist consumption of heritage site.

3. *Prohibit visitation*: Complete ban or closure of areas or partial ban on vulnerable areas.

4. *Virtual experience*: Provision for virtual experience in threatened zones to avoid crowding in these zones.

5. *Conceptual exhibition*: Conceptual art and craft exhibitions may be organised for appreciation of heritage properties.

6. *Price discrimination*: Reducing demand through price discrimination or charging higher fees during peak seasons.

7. *Visitor segmentation*: Audience segmentation on the basis of purpose of visit is effective in zonation, thus dispersing crowd.

8. *Influence visitors*: Visitor behaviour modification to reduce resource consumption in terms of vision, interaction and so on.

9. *Rehabilitation*: Rehabilitation of objects and properties, which require better exposure to visitors and visitor encounter
10. *Shielding objects*: Static displays using glass cases, appropriate chemical treatment for protecting objects/properties.
11. *Time slot*: Regulation of time permitted to spend with the object or duration or length of stay at site or specific zones.
12. *Creation of novel experience*: Constructivist approach leading to meaningful interpretation using creation of experience in collaboration with educators and designers through various visitor-centric activities.
13. *Access restrictions*: Development of facilities providing ease of access only in selective areas.
14. *Use restrictions*: Restrictions on photography, touching of objects/properties in the site.
15. *Site restrictions*: Site restrictions on entry, exit and on mobility of visitors.
16. *Concentrate use of support services*: Develop and maintenance of support services like ATM, comfort stations, shops and refreshment centres at a particular point, which are away from the monuments.
17. *Status of the objects*: Display or announce the condition of the object to the visitors.
18. *Strengthening of infrastructure in selected areas of site*: Expansion and modernisation of related infrastructure for visitor facilitation in selected areas and not at all areas of visitation.

Discussions

One of the main problems associated with cultural and heritage tourism is insufficiency in level of investments directed towards preservation and development of cultural heritage (Wang 2012; Ismagilova *et al.* (2015). In this context, it is relevant to analyse as to

whether tourism development needs to precede heritage conservation or not. Many studies have attempted to analyse the order of precedence (McKercher and du Cros 2002, 2003; McKercher and du Cros. 2005; Puczkó *et al.* 2010). As they provide mutual benefits and trade-offs, it is necessary to harmonise heritage conservation and tourism-related growth, for which proper governance systems must be evolved. The governance mechanism must involve proper coordination and collective response and action by different stakeholders including tourists, government, tour operators, conservation agencies, communities, thus, calling for multi-agency governance pattern (Jessop 2008; Wu 2002; Nuria Galí-Espelt 2012). Conservation approaches must focus on preservation, restoration and include indirect conservation strategies like prevention of deterioration, regular maintenance and must consider the inevitable life cycle of the property while adopting the same (Wang and Bramwell 2012; Ismagilova *et al.* 2015). Such approaches may entail cost and it becomes essential to compute the cost involved and benefits accruing in both short and long run. However, some cost-effective strategies can be evolved.

1. The conservation strategies must be based on the impact of tourism or visitation and also on the basis of deterioration of property and aesthetic value.

2. Continuous monitoring and periodic audit of the status of heritage and cultural properties should be undertaken.

3. As modern tourists emphasise on experiential and educational aspects of tourism, innovative tourism activities involving technology like robotic story narration, creation of ambience mimicking the heritage through lighting or shadow plays and cultural performances in the vicinity of the heritage properties can reduce concentration of visitors.

4. Nominal group technique can be adopted and the feedback and ideas pertaining to ideas of conservation, role of local community members, tourists and approaches involving coordinated action of visitors can be collected from tourists of various profiles.

5. Creation of awareness on the need for cultural property conservation must be propagated along with publicity efforts for heritage and cultural tourism.

Conclusion

An integrated and sustainable mechanism involving communities, tourists and tourism stakeholders in collaboration with conservation authorities for cost-effective coordination action can play a vital role in conservation followed by adoption of scientific methods, as prescribed by international standards, to promote cultural and heritage tourism for the maintenance of cultural properties. At this juncture, the demand for cultural tourism entailing commercialisation and efforts on conservation along with constraints in striking trade-off between propagation and preservation of culture and heritage tourism is *sine qua non* for better management of this heritage of India. The role of conservation is inevitable and requires support and intervention of various stakeholders of tourism. Creation of awareness can lead to understanding and appreciation of the value of tourism resources among the tourists. Heritage and tourism policymakers can be involved in such efforts. Conservation and maintenance go hand in hand and efforts directed towards one component can complement the other. Destination managers need to pay attention to resource management strategies by involving the heritage managers, tourists and community members. The limitation of this study is that it is for a specific domain and may not have much relevance in the context of other tourism resources.

References

Adu-Ampong, E.A. 2014. Divided we stand: institutional collaboration in tourism planning and development in the central region of Ghana. *Current Issues in Tourism*, 20 (3): 1-20.

Albourae, A.T., Armenakis, C., and Kyan, M. 2017. Architectural heritage visualization using interactive technologies. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* XLII-2/W5:7-13.

Berry, S. 1994. Conservation, capacity and cash flows – tourism and historic building management, in *Tourism: State of the art* (A. V. Seaton Ed.), pp. 712–718. Chichester : Wiley.

Bitelli, G., Gatta, G., Guccini, A.M., and Zaffagnini, A. 2019. GIS and Geomatics for archive documentation of an architectural project: The case of the big Arc of entrance to the Vittorio Emanuele II Gallery of Milan, by Giuseppe Mengoni (1877). *Journal of Heritage Management* (in press). Doi. org/10.1016/j.culher.2019.01.002.

Bruno, S., De Fino, M., and Fatiguso, F. 2018. Historic building information modelling: performance assessment for diagnosis-aided information modelling and management. *Automation in Construction* 86: 256-276.

Chhabra, D. 2009. Proposing a sustainable marketing framework for heritage tourism. *Journal of Sustainable Tourism* 17(3): 303-320.

Commission on Sustainable Development. 1996. Report on Identification of Principles of International Law for Sustainable Development. Retrieved December 22, 2018 from http://www.un.org/documents/ecosoc/cn17/1996/background/ecn 171996-bp3.htm.

Feather, J. 2006. Managing the documentary heritage: issues for the present and future, in *Preservation management for libraries, archives and museums* (Gorman, G.E. and Sydney J. Shep Eds.), pp. 1-18. London: Facet.

Harvey, D. C. 2005. Newgrange, heritage and the Irish nation: two monuments of transformation, in *Ireland's Heritages: Critical perspective on Memory and Identity* (M. MecCarthy Eds.), pp.123-137. Aldershot and London: Ashgate.

Ho, P. S. Y., and McKercher, B. 2004. Managing heritage resources as tourism products. *Asia Pacific Journal of Tourism Research* 9(3): 255-266.

Hughes, H. 2000. *Art Entertainment and Tourism*. London: Butterworth-Heinemann.

Hunter, Y.L.C. 2015. Community involvement for sustainable heritage tourism: a conceptual model. *Journal of Cultural Heritage Management and Sustainable Development* 5 (3): 248-262.

ICOMOS 2002. *International Cultural Tourism Charter. Principles and Guidelines for Managing Tourism at Places of Cultural and Heritage Significance*. ICOMOS International Cultural Tourism Committee.

Ismagilova, G., Safiullin, L., and Gafurov, I. 2015. Using historical heritage as a factor in tourism development. *Procedia: Social and Behavioural Science* 188: 257-262.

Jacobs, J., and Gale, F. 1994. *Tourism and the Protection of Aboriginal Cultural Sites*. Canberra: Australian Heritage Commission, Special Publication Series No. 10.

Jessop, B. 2008. A cultural political economy of competitiveness and its implications for higher education, in *Education and the Knowledge Based Economy in Europe* (Jessop, B. Flairclough, N and Wodak, R. Eds.) pp.11-39. Rutterdam and Tapei: Sense.

Kundson, R. 1999. Cultural resource management in context. *Archives and Museum Informatics*. 13 (3): 359-381.

Levy, D. and_Kocher, S. 2009. Understanding tourism at heritage religious sites. *Focus* VI: 18–21.

McKercher, B. and du Cros, H. 2002. *Cultural Tourism: The Partnership between Tourism and Cultural Heritage Management*. New York: Haworth Hospitality Press.

McKercher, B. and du Cros, H. 2003. Testing a cultural tourism typology. *International Journal of Tourism Research* 5: 45–58.

McKercher, B., Ho, P. and du Cros, H. 2005. Relationship between tourism and cultural heritage management: Evidence from Hong Kong. *Tourism Management* 26: 539–548.

Nuria Galí-Espelt 2012. Identifying cultural tourism: a theoretical methodological proposal, *Journal of Heritage Tourism* 7 (1): 45–58.

Nuryanti, W. 1996. Heritage and post-modern tourism. *Annals of Tourism Research* 23: 249–260.

Olsen, D.H. 2006. Management issues for religious heritage attractions, in *Tourism, religion and spiritual journeys* (D.J. Timothy and D.H. Olsen Eds.) pp. 104–118. London: Routledge.

Paul, S. K and Roy, S. 2017. Tourism-based heritage conservation in Murshidabad: an appraisal. *Journal of Heritage Tourism* 12 (2): 139-154.

Pirok, J., Giacomo Moro, Nienke Meekel, Sanne V.J. Berbers, Peter J. Schoenmakers, Maarten R. van Bommelac. 2019. Mapping degradation pathways of natural and synthetic dyes with LC-MS: Influence of solvent on degradation mechanisms. *Journal of Cultural Heritage* 38:29-36. Doi: doi.org/10.1016/j.culher.2019.01.003.

Porter, B.W., and Salazar, N. B. 2005. Heritage tourism, conflict, and the public interest: An introduction. *International Journal of Heritage Studies* 11(5): 361–370.

Psomadaki, O., Dimoulas, C., Kalliris, G., and Paschalidis, G. 2018. *Digital Cultural Heritage, Technologies of Non Linear Storytelling for the Management of Cultural Heritage in the Digital City: The Case of Thessaloniki.* Berlin: Springer.

Puczkó, L., Bárd, E. and Füzi, J. 2010. Methodological triangulation: The study of visitor behaviour at the Hungarian Open Air Museum, in *Cultural Tourism Research Methods*

(Richards, G. and Munsters Eds.), pp. 61–74. Wallingford: CAB International.

Robinson, M. 2001. Tourism encounters: inter- and intra-cultural conflicts and the world's largest industry, in *Consuming Tradition, Manufacturing Heritage* (Al Sayyed, N. Ed.), pp 34-67. London : Routledge.

Sarma, R. 2012. Intangible cultural heritage of Arunachal Pradesh. *Antrocom: Online Journal of Anthropology* 8 (2): 511–530.

Smith, L. 2006. *Uses of Heritage*. London: Routledge.

Su, X. 2011. Heritage production and urban locational policy in Lijiang, China. *International Journal of Urban and Regional Research* 35 (6): 1118-1132.

Taylor, G. 1974. Tourism Research, in *Indicators of change in the Recreation Environment. A National Research Symposium* (Smissen Ed.), pp. 226-232. Pennsylvania State University.

Thomas, R.M. 2003. *Blending qualitative and quantitative research methods in theses and dissertations*. Thousand Oaks, California: Corwin Press, Inc, Sage.

UNESCO. 2003b. Text of the Convention for the Safeguarding of the Intangible Cultural Heritage. *International Convention for the Safeguarding of the Intangible Cultural Heritage.* Retrieved December 22, 2018 from http://unesdoc.unesco.org/images/0013/001325/132540e.pdf.

Wang, Y and Bramwell, B. 2012. Heritage protection and tourism development priorities in Hangzhou, China: A political economy and governance perspective *Tourism Management* 33: 988–998.

Wang, S.Y 2012. From a living city to a world heritage City: authorised heritage conservation and development and its impact on the local community. *International Development Planning Review* 34 (1): 1–17.

Waterton, E. and Smith, L. 2010. The recognition and misrecognition of community heritage. *International Journal of Heritage Studies* 16 (1-2): 4–15.

Wu, F. 2002. China changing urban governance in the transition towards more market oriented economy. *Urban Studies* 39: 1071-93.

Zancheti, A.S.M. and Hidaka, L.T.F. 2011. Measuring urban heritage conservation: theory and structure (part 1). *Journal of Cultural Heritage Management and Sustainable Development* 1 (2): 96–108.

Symposium Resolutions and Suggestions

A. Resolutions

The following resolutions were adopted in the symposium.

- Development of a comprehensive archaeological heritage policy for the nation by involving all the stakeholders.
- Legislation for emphasis on impact assessment prior to infrastructure development. Amendment to the AMASR Act by incorporating rescue archaeology and Cultural Resource Management (CRM) component. CRM may be incorporated in major public projects such as road construction and other projects by allocating a small proportion of the budget for the project documentation and recovery of endangered cultural and heritage sites and monuments.
- Whenever there is an urgent need for salvaging any archaeological site, qualified archaeologists could be permitted to undertake salvage operations, with the condition that the report may be submitted in six months' period. A roadmap can be created to achieve this goal.
- Village-to-village survey can be initiated through the universities with the financial support from ASI and NMMA.
- District level and panchayat level heritage registration needs to be undertaken with the support of Archaeological Survey of India and the State Governments.
- Private owners of archaeological sites and monuments should get tax benefits so long as they preserve them. These sites should be identified as designated sites by the Archaeological Survey of India.
- Grant-in-Aid scheme for conservation of the monuments of less than 100 years by the ASI needs.to be increased and the concept needs to be popularised.

- Compilation of A Comprehensive Register of Heritage sites, structures, waterbodies, natural heritage and cultural heritage sites is necessary. This can serve as the basis for developing heritage policies. This register has to be developed into a nation-wide register.
- Sustained heritage literacy is needed for local communities and stakeholders.
- Tourist Guide Associations and communities need to be involved in heritage management and tourism development processes.
- Educational Social Responsibility scheme could be utilised for conservation and heritage awareness programmes after due consideration.
- Public-Private and Community Participation can be adopted for the development and conservation of heritage sites and monuments.
- Ban tourism in fragile prehistoric sites and historical sites where archaeological deposits are affected by the footfall of tourists.
- Development of village and town museums to promote local heritage and tourism and prevent tourist visit to fragile sites.
- Financial support to promote heritage awareness in the urban as well as rural areas
- Collaboration between local, national, state and central agencies for developing local and national strategies for heritage management in specific regions
- Encourage collaboration for outreach with schools, colleges and universities
- Focus on the research and conservation of non-monumental sites and small sites.
- Appreciation of the unique nature of the prehistoric sites and conservation of these sites for future research.

- Discourage collectors from recovering artefacts from fragile archaeological sites and discourage trade practices in antiquities.
- Allocate sufficient funds for research on smaller regional and historical sites.
- Tax relief or rebates for private individuals/organizations which contribute towards conservation efforts in the form of donations or otherwise.
- Local community or resident communities in and around the sites may be given economic incentives for their participation/ involvement in conservation efforts.
- Efforts by government to curb industrial activities leading to pollution which damage the built heritage structures.
- Technology driven conservation efforts need to be encouraged.
- Conservation efforts can be a part of local planning and development of locality where the heritage property is situated.
- **Thanjavur:** Enhancement of the monument context outside the Thanjavur Brihadiswara Temple.
- **Gangaikondacholapuram:** Development of an archaeological site museum at the palace site.

Signed by K. Paddayya, S.B. Ota, D. Dayalan, Shanti Pappu, S. Suresh, S. Rajavelu, Manabu Koiso, Atsushi Noguchi, Nishizaki Nobuko, Hitoshi Takanezawa, Tomokatsu Uozu, S. Meera and V. Selvakumar

B. Specific Suggestions for Heritage Management offered by the Speakers and Participants

The symposium participants visited Thanjavur and Gangaikondacholapuram monuments and offered suggestions on the facilities required at the sites, and also for a better heritage management in India.

Nation Specific Suggestions for Sites and Monuments

- Good access road to the monuments and their surroundings
- Clean drinking water and toilet facilities at monuments that are promoted for tourism.
- Organised shops for snacks and handicrafts can be created.
- Airconditioned shelters (paid facility) resting of tourists for those who want to avoid sunshine
- Development of good signage and information boards in local languages, English and other international languages, based on visitor profile.
- Interpretation Centres may be conceived as Introduction Centres can be created where the monuments could be introduced to the visitors, more systematically before visiting the monuments
- Publication of brochures on monuments in English and local languages for a price.

Entrance Fees for Foreigners

- Economic differences exist among the foreigners, and foreign students may be given concession for visiting the tourist sites.

Conservation

- More budget can be allotted for conservation.
- Minimal conservation efforts can be done at the sites.

Education and Awareness

- Educating the stakeholders on heritage is important.
- More financial allotment is needed for creating awareness on heritage among the public.
- Periodic festivals fairs, local meeting, rallies, supply of badges, posters for community awareness may be arranged.

Supporting Stakeholders

- Tourist guide training can be offered for empowering the local people.

Academic

- Create awareness on heritage management in academic contexts.
- Introduce the subjects of archaeology and heritage studies and heritage management at the college and university levels in the undergraduate as well as post graduate programmes.
- Heritage clubs could be organised at the school and college levels and financial support may be offered by the government.

Heritage Publications

- Outreach activities on heritage through publications in various languages.
- Publication of books and booklets on heritage at a concessional price.
- Library facilities can be improved at the circle offices of ASI and heritage books can be distributed to local libraries.

Heritage Tourism Site Management

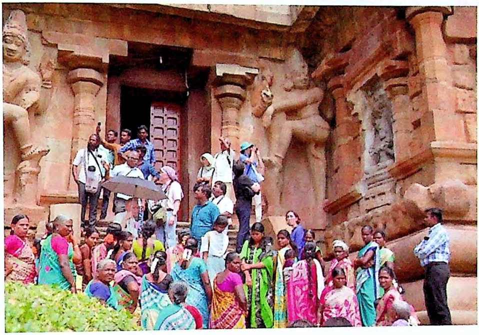
- Regulation of tourists flow into the monuments.
- Regulation of tourism development around the monuments.
- Prohibition of the tourists approaching the sculptures too close.
- Heritage forums may be created at panchayat levels.

By Manabu Koiso, Atsushi Noguchi, Nishizaki Nobuko, Hitoshi Takanezawa, Tomokatsu Uozu, K.R. Sankaran, S. Suresh, A. Chandirabose, C. Uma and V. Selvakumar.

Photo Gallery

Inauguration of the Symposium

Participants of the Symposium



The Symposium team with Heritage Walk participants at Gangaikondacholapuram

The Japanese Team Members at The Tamil University's Palm-leaf Manuscript Library

Glossary

Aayadi - A method of calculation of dimensions used in the construction of traditional structures, including temples in *Vastushastra* (IAIHC 2010).

Adhikaris - Officials of the State often referred to in the inscriptions.

Adi-mukha - Arches of the temples.

Adivasi - Literally means 'Old Inhabitants,' in Sanskrit. Refers to the indigenous or native populations.

Agamic - Related to *Agamas*, which are religious texts on rituals, worship and iconography.

Aghora - A ferocious form of Siva.

Agriturismo - Agriculture and Farmland related tourism of Italy. It refers to tourism related to farm stay and farmhouse resorts.

Angin textiles - A textile tradition of Niigata Prefecture, Japan.

Arangetram - Formal initiation to dance performance after certain period of training.

Ari (*Aari*) - An ethnic community of Ethiopia. Agriculture and pottery making community.

Arsha Pratishta - Images consecrated by sages.

Ayurveda - A traditional medicinal system of India. Siddha medicine is another traditional Indian medicinal system.

Bajaji - Small three-wheeled taxis of Ethiopia. The name derived from the Autorickshaws of Bajaj company of India.

Balalaya - Means little or small (*Bal*=young or small) temple. A temporary shelter meant for the installation of the images of a temple, which is under renovation (Jayanthi 2018).

Bhairava - A form of Siva.

Bhajans - Religious, spiritual poems or renderings sung by devotees.

Birr - *Currency* of Ethiopia. 100 birrs = 4 USD as of 2019 May.

Chimaki - A traditional amulet of the Gion Festival of Japan.

Dashi - A float used in festivals, symbol of the community's pride in Japan.

Ensete - *Enseteventricosum*, commonly known as 'false banana' in Ethiopian language.

Farman - A royal order or letter from Emperor, in Persian language.

Garbhagriha - *Sanctum Sanctorum* or a part of the *Vimana* or *Sri Koyil*of the Hindu temples.

Genkai-shuraku - Marginal settlement in Japanese.

Gopura - The structure above the entrance in the South Indian temples.

Gram panchayat - An administrative body at the level of villages in India.

Granta -A script used in South India for writing Sanskrit.

Gutka (Gutkha) - A sweetened masticatory consisting of tobacco, betel nut and other ingredients used by people.

Hassaku Festival - Festival of August 1 (of the old luni-solar calendar), held for two days at the end of August and September 1, in Japan.

Hime - A princess in Japanese.

Hoko - Another word for *dashi*, a float in Japanese.

Homoclinal - In structural geology, a homocline or homoclinal structure (from old Greek: homo = same, cline = inclination), is a geological structure in which the layers of a sequence of rock strata, either sedimentary or igneous, dip uniformly in a single direction having the same general inclination in terms of direction and angle. Source: Wikipaedia; Jackson *et al.* 2005.

Isson-ippin undo - One Village One Product movement of Japan.

Jirnnoddhara - Repairing the portions which are damaged and mutilated and those that have developed accretions in traditional method of conservation in India. Refers to renovation and restoration.

Jomon - A cultural period in Japan, corresponding to Mesolithic and Neolithic periods.

Kaengata Doki - Flame - shaped pots of *Jomon period* in Japanese.

Kankeijinko - Refers to a population that takes an active interest in the issues of the area in Japanese.

Karrali - A temple constructed with stones in Tamil.

Kaso - Depopulation in Japanese.

Khanda - sphutita -Navakarma - Repairing and renovation, as well as renewal.

Kofun - A Japanese word for 'tumulus' or 'burial mound.

Koryujinko - Means a population that wants to come to the area as tourists and wants to communicate with the local people, in Japanese.

Kumbābishēgam - The ritual consecration of a temple. The finial or *kumba* is bathed in sacred ritual water.

Mahaangas - (head, chest, torso, abdomen regions) of an image (Jayanthi 2018).

Maidan - Open Ground (Hindi).

Manasara - Ancient text on traditional Indian architecture.

Manusha Pratishta - Humanly made images

Maru - Homonym for citadel and round in shape in Japanese.

Mikoshi - Portable shrine or divine palanquin or a holy vehicle where the gods dwell temporarily during the festival.

Minazuki Festival - Festival of July, held for two days in late July in Japan.

Mura-okoshi Project - Project for Revitalising a Small Local Area.

Mursi - An ethnic community of Ethiopia.

Nattars - The assembly of Nadu, supralocal administrative body, of Medieval South India.

Noto Matsuri no Wa - Circle of Festivals in Noto region in Japan.

Nullah - A stream in Hindi.

Omatsuri Act - Act on Promotion of Tourism and Commerce and Industry (in Japan).

Pakka - Well-builtor matured *(Pakka road* = metalled road).

Paḻaṅkaṟpaḍi - According to an old version of an inscription in Tamil.

Palas - A tree (*Butea monosperma*).

Panchagavya - An indigenous herbal germicide inside the sanctum. The five products of cow - milk, curd, ghee, dung, and urine.

Paparazzis - Italian word referring to freelance photographers who follow people with name and fame and photograph their activities for publication in media.

Pratishthapana - Installation or consecration.

Prayaschittavidhi - Rule of atonement.

Puja - Formal or Ritual methods of worship.

Punarudharana - Rejuvenation or renovation.

Ram Navmi - A festival celebrated on the birthday of the Hindu deity of Rama.

Rauza-i-munavvara - Illumined Tomb.A name of Taj Mahal.

Sambirani - Tamil word for incense deriving from *Styras Benzoin* tree.

Frankincense is similar substance from another tree of genus *Boswellia.*

Sangam Literature - Tamil Texts of Early Historic period, normally placed around the beginning of the Common Era.

Shiro - Homonym for castle and white in Japanese.

Sikhara - The member of top of the Vimana of South Indian Temples.

Silpa texts - The traditional Indian texts on sculpture and iconography

Sphuta (*sphutita*) - Mean "bulged" or "out of plumb" portions.

Sphuta-navikarana - Removing accretions.

Sthapati - Tradition architects of India.

Stupi - The finial or *kalasa* (pot) of the temple on top of *Vimana* or *Gopura.*

Sudhakarana - Application of new white colour or plastering with white mortar.

Sunnam (Chunnam) - Lime prepared from sea shells.

Svarga - The concept of heaven in Indian tradition.

Svayambhu Murtis - The images that are believed to have appeared naturally. Perhaps a natural stone or form placed for worship.

Tānattār - The administrators of the temple during the medieval period. Temple trustees, referred to in the medieval inscriptions.

Taru-gulma-nirmaalikarana - Removing the over grown vegetation, moss and lichen.

Tatpurusha - A form of Siva.

Ubhayananadesis - Merchants of the medieval merchant guilds of India.

Upana - The bottom-most member of *Adhistana* or basement of a temple in South India.

Urār - The village assembly of Medieval South India.

Usnisas - Coping stones of Stupas.

Vastusastra - Traditional Indian system of Architecture. Science of Architecture.

Vatteluttu or *Vattezhuttu* - A script of cursive character used in the medieval period for writing Tamil and Malayalam in South India.

Vimana - The main shrine of a South Indian temple including the tower and*garbhagriha.*

Yo-miya - The eve of the festival, with the *yama*, a festival float celebrated in Japan.

Yuru-chara - Local mascot in Japanese.

References

IAIHC 2010= Info on Architecture, Interiors and House Construction In India, http://architectureideas.info/2010/01/ vastu - shastra - principle - aayadi - dimensions/#meaning - of - aayadi

Jackson, J.A, J.Mehl and K. Neuendorf 2005. *Glossary of Geology.* Alexandria, Virginia: American Geological Institute.

Jayanthi, Abhijith 2018. Ashta Bandhana Balalaya Maha Samprokshanam: Truth Vs Myth. https://www.facebook.com/notes/ abhijith - jayanthi/ashta - bandhana - balalaya - maha - samprokshanam - truth - vs - myth/2027598113959663/. Monday, July 16, accessed May 2019.

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Cover Images: **Left,** Shore Temple, Mamallapuram, A.M.V. Subramanyam and S. Vetriselvi; **Right,** Lifting up and turning the float by the locals and the University students in Minazuki Festival at Fukusumi, Sasayama-Shi, Hyogo, Japan, by Hitoshi Takanezawa, 2018

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